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ABSTRACT

This volume is the second in an annual series surveying the lifestyles and values of youth. Presented here are detailed statistics on the prevalence of drug use among American high school seniors in 1978 and on trends in those figures since 1975. Research involved annual data collection in approximately 125 public and private high schools across the U.S. Explored are students' attitudes about drug use, exposure to drug use, and perceptions about the availability of drugs. New subjects covered this year include the intensity and duration of the highs usually experienced with the various drugs and the cross-cohort comparisons of the rate of initiation into drug use. Also new this year are two figures in each drug chapter that deal with trends in drug use at earlier grade levels. Finally, two new chapters have been added that deal with certain relevant aspects of the social milieu in which American teenagers find themselves. (Author)

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DRUGS AND THE CLASS OF '78: BEHAVIORS, ATTITUDES, AND RECENT NATIONAL TRENDS

by

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NOTE: See inside front cover for a content-organized listing of tables and figures in Chapters 2 through 12.

PREFACE

This is the second in a series of publications from the national research and reporting series 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 here are detailed statistics on the prevalence of drug use among American high school seniors in 1978, 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 (Abelson, Fishburne, 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 groups and subgroups who have ever used various drugs. This is done to help differentiate levels of seriousness, or extent, of drug involvement. While we may yet lack any public consensus of what levels of use constitute "abuse," there is surely a consensus that heavier levels of use are more likely to have detrimental effects for the user and society than are lighter levels. Therefore, it is important to talk not only about the breadth of involvement but about the depth of it, as well. In fact, the findings on daily marihuana use contained in the first volume in this series have served to draw the attention of policy-makers and the public to a growing phenomenon which may prove to have serious implications for public health.

In addition to describing prevalence and trends in use, this volume contains an assessment of current 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 three years. It also considers, in Chapter 16, the extent to which drugs are available to high school age youth and what has been happening to availability over the last three years—at least as the students see it.

New Subjects Covered This Year

We are focusing here for the first time on two other aspects of drug using behavior which have received very little attention in the drug epidemiology literature to date: (a) the intensity and duration of the highs usually experienced with the various drugs, and (b) cross-cohort comparisons of the rate of initiation into drug use. In one of the five questionnaire forms contained in each year's survey, users of each class of drugs have been asked to rate on a four-point Likert scale the intensity of the highs they usually

experience. They are also asked to indicate the length of time they usually stay high when using that drug. These questions were developed as rough indicators of the quantity of drugs consumed on the average occasion. The use of these measures was necessitated in large part by the fact that most drugs used illicitly do not come in standard units of quantity or purity (such as ounces, milligrams, proof, etc.), and even if they do, the users are often unaware of what the quantities and purities are. Therefore, despite the subjective nature of these measures, particularly the one rating the intensity of the high being experienced, we decided to approach the issue of quantity through this indirect route. Using these measures we have attempted to characterize the length and subjective intensity of the highs usually associated with each drug, to compare the different types of drugs on these dimensions, and to monitor shifts over time—shifts which may reflect changes in the purity/quantity of each type of drug being used on the average occasion. In each of the chapters in this volume dealing with specific types of drugs, a table has been added (usually Table 10) showing the cross-time results on these questions.

Also new this year are two figures in each drug chapter which deal with trends in drug use at earlier grade levels. Both figures are based on data from the last four senior classes concerning the grade in which they first used each drug. In one figure, trends in prevalence rates at lower grade levels have been reconstructed. In the other, increases in lifetime prevalence with age are traced across the years for each graduating class. The first figure documents trends in prevalence at lower grade levels in earlier years, while the second illustrates the differences associated with growing up in an earlier versus a later cohort (graduating class).

Finally, two new chapters have been added which deal with certain relevant aspects of the social milieu in which American teenagers find themselves. Chapter 14 examines the attitudes of parents and friends, as perceived by seniors, regarding their possible use of the various types of drugs; and trends in parental and peer attitudes are documented, as well. In Chapter 15, we examine the extent to which young people are actually exposed to drug-taking and the proportion of their close friends who are users of the various drugs. Again, trends in these important aspects of the social milieu are documented and discussed.

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 from this volume on prevalence and trends in use. 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 the Volume

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 this 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 ten tables with comparable table numbers from chapter to chapter. Thus, for example, the information in Table 5 in Chapter 2 (on marijuana) is comparable to that in Table 5 of Chapter 3 (on inhalants). Since the questions concerning cigarette use are somewhat different from those on the other drugs, the table sequence in Chapter 12 departs from that used in the first eleven chapters. A brief guide for interpreting the tables can be found in Appendix C, and all measures discussed in the volume are operationally defined in Appendix D. 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 second 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 1979 of four volumes—one each for the surveys in 1975, 1976, 1977, and 1978—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. These volumes are being published by the Publications Division of the Institute for Social Research, at the University of Michigan, Box 1248, Ann Arbor, Michigan, 48106.

In addition to the usual publications in professional journals, there will be a series of occasional papers, also 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. Readers wishing to be notified of the contents of this series, as well as other publications from the study, may write to the authors.

Acknowledgments

A great many people have contributed to the launching and development of this research effort. A number of officials of the National Institute on Drug Abuse and the former Special Action Office for Drug Abuse Prevention gave encouragement and advice at the outset—in particular, Richard Bucher, Robert DuPont, William Pollin, and Louise Richards. The members of our Advisory Committee have provided review and suggestions

regarding instrumentation and design. In addition to Drs. Bucher and Richards, the committee members are John Ball, Donald Campbell, Ira Cisin, Wilbur Cohen, O. Dudley Duncan, Dorothy Gilford, Eric Josephson, Robert Kahn, Donald Michael, and Lee Robins.

Also fulfilling an advisory function in the development of this series have been our project officers at the National Institute on Drug Abuse, Louise Richards and Joan Dunne Rittenhouse.

Finally, we would like to acknowledge the thousands of recent high school seniors, their teachers and their principals, whose cooperation and generous participation have made this work possible.

January 1979
Ann Arbor, Michigan

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I. INTRODUCTION

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INTRODUCTION

This report deals with high school seniors in the class of 1978—their drug use, attitudes about drug use, exposure to drug use, and perceptions about the availability of drugs. 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 1978.

Purposes and Rationale of the Study

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 is the second in a series which is intended to provide a relatively accurate picture of the drug experiences and attitudes of each high school class in the United States. More importantly, it is intended to monitor 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).

As 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.

*The project also gathers longitudinal data from the members of each graduating class for a period of six years after high school graduation. Trend data for this age segment—and particularly for those in certain major sectors such as college and military service—will be reported in future publications from the study.

Research Design and Procedures*

The basic research design involves annual 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 these environmental transitions are not the only important changes which coincide 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 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 (Golladay, 1976, 1977)—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 characteristics of the entire age group, the omission of high school dropouts does introduce certain biases; however, their small proportion sets outer limits on the bias (Johnston, O'Malley, & Eveland, 1975, Appendix B). For the purposes of estimating changes from one cohort of high school seniors to another, the omission of dropouts represents a problem only if different cohorts have considerably different proportions who drop out. However, we have no reason to expect dramatic changes in those rates for the foreseeable future, and recently published government statistics indicate a great deal of stability in dropout rates since 1967 (Golladay, 1976, p. 62; 1977, p. 81).

*A more extensive description of the research design may be found in Bachman and Johnston (1978).

Some may use our high school data to draw conclusions about changes in drug use for the entire age group. While we do not encourage such extrapolation, we suspect that the conclusions reached would be valid, on the whole, since over 80% of the age group is in the surveyed segment of the population and since we expect that change among those not in school are very likely to parallel the changes among those who are. 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 data for this age group from the present study with those from interview studies, the findings have shown a high degree of similarity in prevalence rates.

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 number of participating schools and students:

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

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. 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 60 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 (SRC) representative is assigned to carry out the administration.

Advance Contact with Teachers and Students. 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 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.

Content Areas and Questionnaire Design. Drug use and related attitudes are the topics which receive the most extensive coverage in the Monitoring the Future project; however, the questionnaires also 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.*

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

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.

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 is also desirable that these procedures be described adequately to respondents so that they are comfortable about providing honest answers.

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 you or your parents would find objectionable for any 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 that name and address be written on a special form which will be removed from the questionnaire and handed in separately. The message also points out that 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 Survey Research Center (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. Then 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 the two again. The questionnaires have an ordered sequence of code numbers, but the computer-printed 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 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 total of 123 interviewees, 91 had completed a Monitoring the Future questionnaire during the previous day. Only two of these respondents said that 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 could 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. With very few exceptions, each school which has participated for the first year 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, the SRC representatives 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 per year. 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 +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 +.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 should tend to be consistent from one year to another, which means that the measurement of trends should be affected very little by any such biases.

II. MAIN FINDINGS: 1978

Chapter I

SUMMARY AND OVERVIEW

This chapter presents a summary and integration of the findings contained in the remaining fifteen 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 marijuana, but no other illicit drug during the time interval, and (3) those who report using any illicit drug other than marijuana during the time interval. People in the third category may or may not use marijuana 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 grade of first use of drugs, intensity of highs, and the attitudes and beliefs of high school seniors regarding various types of drug use. Finally, the key points from Section III on the social milieu are listed. These deal with the perceptions seniors have of their parents' and peers' attitudes regarding drug use, seniors' exposure to use, and perceived availability of drugs.

Prevalence of Drug Use

This section summarizes the levels of drug use reported by the class of 1978. Data are included for lifetime use, use during the past year, use during the past month, and daily use. There is also a comparison of key subgroups in the population (based on sex, college plans, region of the country, and population density or urbanicity).

Prevalence of Drug Use in 1978: All Seniors

Lifetime, Monthly, and Annual Prevalence

Table(s)

- Between six and seven in every ten seniors (64.1%) report illicit drug use at some time in their lives. However, a substantial proportion of them have used only marihuana (27.6% of the sample or 43% of all illicit users). 9
- Over one-third of the seniors (36.5%) report using an illicit drug other than marihuana at some time.* 9
- Figure A gives a ranking of the various drug classes on the basis of their lifetime prevalence figures. 3
- Marihuana is by far the most widely used illicit drug with 59% reporting some use in their lifetime, 50% reporting some use in the past year, and 37% use in the past month. 3,4,5
- The most widely used of the other illicit drugs are stimulants (23% lifetime prevalence) followed by two other classes of psychotherapeutic drugs: tranquilizers (17% lifetime prevalence) and sedatives (16% lifetime prevalence).** 3
- Next come hallucinogens (such as LSD, THC, PCP, mescaline, peyote) which have been used by about one in every seven students (14% lifetime prevalence). 3
- About one in every seven or eight students has used cocaine, and about one in every eight or nine has used inhalants. Opiates other than heroin have been used by one in ten (10%). 3
- Only 1.6% of the sample admitted to ever using any heroin, the most infrequently used drug. 3
- These illicit drugs remain in about the same order when ranked by their prevalence in the most recent month and in the most recent year, as the data in Figure A illustrate. The major change in ranking occurs for inhalants, which, unlike other drugs, are used in the senior year by only a small proportion of those who had ever used them. This occurs because inhalants tend to be used primarily at an earlier age. Fig A
- Use of either of the two major licit drugs, alcohol and cigarettes, is still more widespread than use of any of the illicit drugs. Nearly all students have tried alcohol (93%) and the great majority (72%) have used it in the past month. 3,5

*Use of "other illicit drugs" includes any use of hallucinogens, cocaine, or 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 75% report having tried cigarettes at some time, and 37% smoked at least some in the past month.

3,5

Daily Prevalence

- Frequent use of these drugs is of greatest concern from a health and safety viewpoint. Table 6 and Figure B show the prevalence of daily or near daily use of the various classes of drugs. For all drugs, except cigarettes, respondents are considered daily users if they indicate that they had used the drug on twenty or more occasions in the preceding 30 days. For cigarettes, they explicitly state use of one or more cigarettes per day.
- The displays show that cigarettes are used daily by more of the respondents (28%) than any of the other drug classes. In fact, 18.8% say they smoke half-a-pack or more per day.
- A particularly important finding is that marihuana is now used daily by a substantial fraction of the age group (10.7%). The proportion using alcohol daily stands at 5.7%.
- 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 sedatives is .2%, for tranquilizers .1%, and for opiates other than heroin .1%. While very low, these figures are not inconsequential considering that 1% of each high school class represents about 30,000 individuals.
- Not surprisingly, given the strength and duration of their effects, hallucinogens are used on a daily basis by only about .1% of the sample. Cocaine also is used daily by only about .1% of the sample, as are inhalants.
- Virtually no respondents (less than .05%) report daily use of heroin in senior year. However, in the opinion of the investigators heroin is the drug most likely to be under-reported in surveys, so the absolute prevalence figures may be somewhat understated.

6
Fig B

6

6

6

6

6

Prevalence Comparisons for Important SubgroupsSex Differences

- In general, higher proportions of males than females are involved in drug use, especially heavy drug use; however, this picture is a complicated one.
- Overall marihuana use is somewhat higher among males, and daily use of marihuana is substantially higher among males (14.2% vs. 7.1% for females in 1978).

10

10

Table(s)

- On most other illicit drugs males have considerably higher prevalence rates. 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 slightly 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. (See Table 5 in the relevant chapters for frequent use.) 10
- Annual prevalence for the use of stimulants is about equal for both sexes, though more of the frequent users are female than male. Slightly more females than males also are using tranquilizers, but frequent use occurs about equally for both sexes. (See Table 5 in the relevant chapters for frequent use.) 10
- Despite the fact that most illicit drugs are used by more males than females, nearly equal proportions of both sexes report at least some illicit use of drugs other than marihuana during the last year (see Figure D). If one thinks of going beyond marihuana as an important threshold point in the sequence of illicit drug use, then nearly equal proportions of both sexes (28% for males vs. 26% for females) were willing to cross that threshold at least once during the year. However, the female "users" take fewer drugs and with less frequency. Fig D
- Greater than occasional use of alcohol tends to be disproportionately concentrated among males. Daily use, for example, is reported by 8.3% of the males but by only 3.2% of the females. (See Table 10 in Chapter 11.)
- Finally, for cigarettes, there is practically no sex difference in the prevalence of smoking a half-a-pack or more daily (18.9% for males vs. 18.0% for females), although among these regular smokers males appear to consume a somewhat higher quantity of cigarettes. (See Tables 4 and 5 in Chapter 12.)

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. 10
- Annual marihuana use is reported by 47% of the college-bound and 52% of the noncollege-bound. 10
- There is a substantial difference in the proportion of these two groups using illicit drugs other than marihuana. In 1978 only 23% of the college-bound reported any such behavior in the prior year vs. 30% of the noncollege-bound. Fig E

Table(s)

10

- For all of the specific illicit drugs, annual prevalence is lower for the college-bound; in fact, the prevalence rates tend to be about a quarter to half again as large for the noncollege-bound as for the college-bound on all illicit drugs except marihuana.
- Frequent use of all of the illicit drugs is even more disproportionately concentrated among students not planning four years of college.
- Frequent alcohol use is also more prevalent among the noncollege-bound. For example, drinking on a daily basis is nearly twice as common at 7.3% for the noncollege-bound vs. 4.1% for the college-bound. (See Table 10 of Chapter 11.) On the other hand, there are practically no differences between the groups in annual or monthly prevalence; 88% of both groups used alcohol at least once during the past year, and 73% of the noncollege-bound vs. 72% of the college-bound used it at least once in the past month.
- The largest difference of all between the college plans groups involves daily smoking. Only 11% of the college-bound smoke a half-a-pack or more daily, compared with 26% of the noncollege-bound. (See Table 4 of Chapter 12.)

Regional Differences

- In general, there are not very great regional differences in 1978 in rates of illicit drug use among high school seniors. The highest rate is in the Northeast, where 62% say they have used a drug illicitly in the past year, followed by North Central with 55%, the West with 53%, and the South with 48%. Fig F
- There is even less regional variation in terms of the percent using some illicit drug other than marihuana in the past year: 31% in the Northeast, 27% in the North Central, 29% in the West, and 24% in the South. Fig F
- As Table 10 illustrates, the Northeast shows the highest annual rate (or close to the highest rate) on all drugs, licit and illicit, except heroin. The North Central shows the highest rate on inhalants. The West shows a high annual prevalence for cocaine use, while the South shows the lowest for marihuana, hallucinogens, cocaine, other opiates, and stimulants. However, these findings should be interpreted cautiously, since a number of the regional differences are quite small. (See Table 10.) 10
- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central. 10

- 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, 17% in the South, and only 12% in the West. (See Table 4, Chapter 12.)

Differences Related to Population Density

- Three levels of population density (or urbanicity) have been distinguished for analytical purposes: (1) Large SMSAs, which are the twelve largest Standard Metropolitan Statistical Areas in the 1970 Census; (2) Other SMSAs, which are the remaining Standard Metropolitan Statistical Areas; and (3) Non-SMSAs, which are sampling areas not designated as metropolitan.
- Overall illicit drug use is highest in the largest metropolitan areas (60% annual prevalence); slightly lower in the other metropolitan areas (55%), and lowest in the nonmetropolitan areas (48%). Fig G
- There is somewhat less variation in the proportion using illicit drugs other than marihuana: 30% 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 57% in the large cities but only 43% in the nonmetropolitan areas. 10
- The use of hallucinogens, other opiates, and cocaine also is positively correlated with urbanicity, though less strongly. Alcohol use also is positively correlated. 10
- There is rather little difference associated with urbanicity in the case of most psychotropic drugs (stimulants, sedatives, and tranquilizers). 10

Trends in Prevalence 1975-1978: All Seniors

Trends in Lifetime, Annual, and Monthly Prevalence

- The past three years have witnessed an appreciable rise in marihuana use without any concomitant increase in the proportion using other illicit substances. While 47% of the class of 1975 used marihuana at least once during their lifetime, fully 59% of the class of 1978 had done so. The corresponding trend in annual marihuana prevalence is from 40% to 50%. 3,4

Table(s)

- There has been practically no increase in the proportion who are users of illicit drugs other than marihuana. This proportion has remained steady over the last three years at about 36% for lifetime prevalence and between 25% and 27% for annual prevalence. 9
Fig C
- Because of the increase in marihuana use, the overall proportion of seniors involved in illicit drug use has been increasing. About 64% of the class of 1978 report having used some illicit drug at least once during their lifetime, compared with 55% of the class of 1975. Annual prevalence figures have risen from 45% to 54% over the same interval (see Figure C). 9
Fig C
- Although the proportion using other illicit drugs has remained relatively unchanged over the last two years, some interesting changes have been occurring for specific drugs within the class. (See Tables 3, 4, and 5 for recent trends in lifetime, annual, and monthly prevalence figures for each class of drugs.) 3,4,5
- The decline in hallucinogen use over the previous two year interval (from 11% in 1975 to 9% in 1977 for annual prevalence), appears to have halted. The 1978 figure is 9.6%. The number of frequent users had 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; but in 1978 the number was .6%. 4
- Cocaine, on the other hand, has exhibited an accelerating increase in popularity, with annual prevalence going from 5.6% in the class of 1975 to 9.0% in the class of 1978. While the majority of these seniors use cocaine only once or twice during the year, there is now getting to be a detectable number of frequent users. 3,4,5
- The use of opiates other than heroin, which had been increasing since 1975 (when 5.7% admitted use during the year, compared with 6.4% in 1977) is no longer increasing. Annual prevalence in 1978 is 6.0%. 3,4,5
- The popularity of sedatives appears to be declining very gradually among seniors. Annual use dropped steadily from 11.7% in 1975 to 9.9% in 1978, and for the first time this year tranquilizer use has shown some indications of declining. 4,5
- Heroin lifetime prevalence also appears to be dropping very gradually (from 2.2% in 1975 to 1.6% in 1978), though findings about heroin must be viewed with considerable caution. Annual prevalence, however, has been steady for two years. 3,4
- The use of stimulants has remained essentially unchanged across the last four classes. 3,4,5

Table(s)

- Trend data on inhalant use exist only over the past two-year interval, since this class of drugs was included for the first time in 1976. There has been some increase in prevalence over that interval. Annual prevalence rose from 3.0% to 4.1%—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 1978 there has been a gradual but steady upward shift in the prevalence of alcohol use among seniors. To illustrate, the annual prevalence rate rose from 85% in 1975 to 88% in 1978. 3,4,5
- Over the past year there was virtually no change in lifetime prevalence of cigarette use, but a statistically significant drop (for the first time) in monthly prevalence. 3,5

Trends in Daily Prevalence

- Table 6 provides information on recent trends in daily use of the various drugs. It shows that for all illicit drugs other than marihuana and tranquilizers there has been virtually no change over the last two years in the very low daily prevalence figures. 6
- Tranquilizer use on a daily basis increased significantly between 1975 and 1977 (from .1% to .3%) but dropped significantly this year down to .1%. 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 risen considerably, so that now one in every nine high school seniors (10.7%) indicates that he or she uses the drug on a daily or near daily basis. 6
- Alcohol has not shown a comparable rise in use during the same time period. Daily use has remained steady between 5.7% and 6.1%. It is currently at 5.7%, exactly where it was in 1975. 6

Trend Comparisons for Important SubgroupsSex Differences in Trends

- Most of the sex differences mentioned earlier have remained relatively unchanged over the past three years--that is, any trends in overall use have occurred about equally among males and females, as the trend lines in Figures H through J demonstrate. There is, however, one important exception. Fig D,H,I,

- While the proportion smoking half-a-pack or more per day of cigarettes remained quite constant for males from 1975 to 1977 (at about 20%), between 1975 and 1977 the rate of cigarette smoking for females increased from 16% to 19%, virtually eliminating the previous sex difference. Over the past year, however, regular smoking was observed to decline in parallel for both sexes. (This decline is very slight and not statistically significant.)

Fig J

Trend Differences Related to College Plans

- Both the college-bound and the noncollege-bound have been showing parallel trends in overall illicit drug use over the last two years;* that is, both showed a rising proportion using marihuana only, and a steady (or only slightly increasing) proportion using illicit drugs other than marihuana.

Fig E

Regional Differences in Trends

- As Figure F illustrates, between 1975 and 1978 the proportion of seniors using illicit drugs other than marihuana has remained relatively steady in all regions except the Northeast, where there has been an increase from 26% to 31%. Much of the increase in the Northeast may be due specifically to cocaine use, which has increased more there than elsewhere.
- The proportion using marihuana only has been steadily increasing in all regions though in the West the size of the increase has been only about half what it has been in the three other regions.

Fig F

Fig F

Trend Differences Related to Population Density

- From 1975 to 1978, the proportion using any illicit drug increased by about 5% in the large metropolitan areas, and by about twice that amount in the other metropolitan and non-metropolitan areas. As a result, the differences between the very large cities and less metropolitan areas have narrowed. Most of the narrowing is due to marihuana use.
- Use of the other illicit drugs taken as a group has not changed at all in the very large cities, and has increased by only 1% in the other areas. However, for most of the specific drugs there has been a narrowing of the differences. The major exception is cocaine, which has increased more in the large metropolitan communities, where its use was already highest.

Fig G

Fig G

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

Use at Earlier Grade Levels

- Most initial contact with illicit drugs occurs during the last three years of high school. Each illegal drug, except marihuana, had been used by fewer than 8% of the class of 1978 by the time they entered tenth grade. 11
- Twenty-eight percent had used marihuana, and twice that number had used alcohol prior to tenth grade. Twenty percent had begun smoking cigarettes daily by that point. 11
- Alcohol and marihuana use was initiated during 10th, 11th, or 12th grade by considerable proportions of the seniors (37% and 31%, respectively). Daily cigarette smoking was begun by 12%. 11
- Use of the illicit drugs other than marihuana (or heroin) was initiated subsequent to the beginning of 10th grade by between 5% (for inhalants) and 16% (for stimulants). 11
- For each illicit drug class except inhalants, less than half of the users had begun use prior to tenth grade. Among those who had used cocaine by senior year, only one in six had used prior to tenth grade; but among marihuana users, just under half had begun before tenth grade. For all the other illicit drugs (excepting inhalants), the corresponding proportion is roughly one-third. These data indicate that significant minorities of users are initiated into illicit drug use at early ages--prior to tenth grade. 11
- Among inhalant users, a clear majority of users (nearly two-thirds) had their first experience prior to tenth grade. 11

Degree of Highs

The report this year includes several questions, dealing with the degree and duration of the highs which respondents experienced as a result of drug use. For the sake of brevity we focus here only on the questions concerning how high users say they usually get. More information on the degree and duration of highs associated with each drug can be found in Table 10 in the relevant chapters.

- Figure K shows the extent to which 1978 seniors indicate that they usually get "not at all", "a little", "moderately", or "very" high on those occasions when they used a given type of drug. The percentages in Figure K are based on all respondents who report use of the given drug class in the previous twelve months, and therefore all the bars cumulate to 100%. The ordering from left to right, is based on the percentage reporting usually getting "very" high. The widths of the bars are proportional to the percentage of all seniors Fig K

Table(s)

having used each drug class in the previous year; this should serve as a reminder that even though a large percentage of users of a drug may get very high, the percentage of all seniors doing so may be relatively small.

- The drugs which usually seem to result in intense highs are the psychedelics (LSD and other psychedelics), heroin and quaaludes. (Actually, heroin has been omitted from Figure K because of the small number of cases available for a given year, but an averaging across years indicates that it would rank second, after LSD, in Figure K.) Fig K
- Next come cocaine, opiates other than heroin, and marihuana: over 70% of the users of each say they usually get moderately high or very high when using the drug. Fig K
- The three major psychotherapeutic drug classes—barbiturates, amphetamines, and tranquilizers—are used by relatively few to get very high, although substantial proportions of users (from 45% to 70%) still say they usually get moderately high after taking these drugs. Fig K
- Relatively few of the many seniors using alcohol say that they usually get very high when drinking, although nearly half usually get at least moderately high. However, for a given individual we would expect more variability from occasion to occasion in the degree of intoxication achieved with alcohol than with most of the other drugs. Therefore, many drinkers who do not "usually" get very high certainly get very high sometimes. Fig K

Attitudes and Beliefs

In this section 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. (A more detailed treatment of these data is provided in Chapter 13.)

Perceived Harmfulness of Drugs

Beliefs in 1978 about Harmfulness

- A substantial majority of high school seniors perceive regular use of any of the illicit drugs, other than marihuana, as entailing "great risk" of harm for the user (see Table 13-1). Some 87% of the sample feel this way about heroin—the highest proportion for any of these drugs. The proportions attributing great risk to amphetamines, barbiturates, and cocaine are all about 68%, while 8 % associate great risk with using LSD.
- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (59%) as entailing great risk of harm.
- In contrast to the above figures, regular use of marihuana is judged to involve great risk by only 35% of the sample, or about one in three.
- Regular use of alcohol was more explicitly defined in several questions. Very few (20%) 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.
- Compared with the above perceptions about the risks of regular use, many fewer respondents feel that the experimental or occasional user runs a "great risk" of harm.

Trends in Perceived Harmfulness

- For most of the illicit drugs there has been a small but consistent trend over the past three 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.
- The greatest decline in perceived risk has involved marihuana and cocaine.

- In dramatic contrast to the above trends, there has been a fair-sized and steady increase in the number who think smoking cigarettes involves great risk to the user (51% in 1975 vs. 59% in 1978), a particularly encouraging finding.

Personal Disapproval of Drug Use

- A substantial majority of high school seniors express disapproval of regular use of each of the illicit drugs, ranging from 68% disapproving regular marihuana use up to 92% disapproving regular cocaine use (the second lowest) and 98% disapproving regular heroin use (see Table 13-2).
- Smoking a pack (or more) of cigarettes per day receives the disapproval of two-thirds (67%).
- Drinking at the rate of one or two drinks daily also receives disapproval from two-thirds of the seniors (68%)—exactly the same proportion who disapprove regular marihuana use.
- For all drugs fewer people indicate disapproval of experimental or occasional use than of regular use, as would be expected. The differences are not great, however, for the illicit drugs other than marihuana.
- For marihuana the rate of disapproval is substantially less for experimental use (33%) and occasional use (44%) than for regular use (68%). In other words only one out of three disapprove of trying marihuana and less than half disapprove of occasional use of the drug.
- Despite the decline in perceived harmfulness of most drugs, licit and illicit, there has been very little change over the past three years in levels of disapproval for most of them. The two exceptions, alcohol and marihuana, are discussed in Chapter 13.

Attitudes Regarding the Legality of Drug Use

Table 13-3 presents a statement of one set of general questions on this subject along with the answers provided by each senior class.

- Fully 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 (50%).
- The majority (60%) favor legally prohibiting marihuana use in public places.
- In addition, the great majority believe that the public use of illicit drugs other than marihuana should be prohibited by law (e.g., 76% in the case of amphetamines and barbiturates, 83% for heroin).

- For all drugs, substantially fewer students believe use in private should be illegal than express that view about public use.
- Over the past three years⁸ there has been a decline in the proportion of seniors who favor legal prohibition of use in private of any of the illicit drugs.
- Although there was a similar decline between 1975 and 1977 for use of illicit drugs in public, this trend reversed slightly between 1977 and 1978. (None of these reversals, however, was large enough to be statistically significant.)

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. (The questions and responses are shown in Table 13-4.)

- About a third of the 1978 seniors believe marihuana use should be entirely legal (33%). Nearly another third (30%) feel it should be treated as a minor violation—like a parking ticket—but not as a crime. Another 15% indicate no opinion, and only 22% feel it should be a crime.
- Asked whether they thought it should be legal to sell marihuana if it were legal to use it, nearly two-thirds (66%) said yes.
- High school seniors predict that they would be little affected by the legalization of the sale and use of marihuana.
- The predictions of personal marihuana use under legalization are quite similar for all four high school classes. The slight shifts being observed are mostly attributable to the increased proportion of seniors who actually have used marihuana.

The Social Milieu

The preceding section dealt with seniors' attitudes about various forms of drug use. Attitudes about drugs, as well as drug-related behaviors, do not occur in a social vacuum. Drugs are discussed in the media; they are a topic of considerable interest and conversation among young people; they are also a matter of much concern to parents, concern which often is strongly communicated to their children. These are some aspects of the social milieu in which drug-taking occurs and within which drug-related attitudes are developed. Other aspects of that milieu include the actual drug-taking behaviors of friends and acquaintances, as well as the availability (or perceived availability) of drugs. In the remaining sections we present data on several of these aspects of the social milieu surrounding drugs.

We begin with two sets of questions about parental and peer attitudes, questions which closely parallel the questions about respondents' own attitudes about drug use (discussed in the preceding section). (These two sets of questions are displayed in Tables 14-1 and 14-2).

Perceived Attitudes of Parents and Friends

Current Perceptions of Parental Attitudes

- A large majority of seniors feel that their parents would disapprove or strongly disapprove of their exhibiting any of the drug use behaviors shown in Table 14-1.
- Over 95% of seniors say that their parents would disapprove or strongly disapprove of their smoking marihuana regularly, trying LSD or an amphetamine even once or twice, or having four or five drinks every day.
- While respondents feel that marihuana use would receive the least parental disapproval of all of the illicit drugs, even experimenting with it still is seen as a parentally sanctioned activity by the great majority of the seniors (83%), which of course means that seniors around the country feel that there remains a massive generational difference of opinion about this drug.
- Also likely to be perceived as rating high parental disapproval (89% to 91% disapproval) are occasional marihuana use, taking one or two drinks nearly every day, and pack-a-day cigarette smoking.

Current Perceptions of Friends' Attitudes

- Peer norms differ considerably for the various drugs and for varying degrees of involvement with those drugs, but overall they tend to be relatively conservative. The great majority of seniors have friendship circles which do not condone use of the illicit drugs other than marihuana and nearly two-thirds have close friends who they feel would disapprove of regular marihuana use or daily drinking.

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

- A comparison of the perceptions of friends' disapproval with perceptions of parents' disapproval shows that the ordering of drug use behaviors is much the same for the two groups (e.g., highest frequencies of perceived disapproval for trying LSD or amphetamines, lowest frequencies for trying marihuana).

- A look back at the data from the previous section (Table 13-2) reveals that seniors' own attitudes regarding drug use are much more in accord with those of their peers than with those of their parents. The difference between seniors' own disapproval ratings and those of their parents tend to be large, with parents seen as more conservative overall in relation to every drug, licit or illicit. The largest difference occurs in the case of marijuana experimentation, where 33% say they disapprove but 83% say their parents would.
- In contrast, the difference in 1977 between seniors' own disapproval and their ratings of friends' disapproval is no larger than 4% for the majority of drug use dimensions.

Trends in Perceptions of Parents' and Friends' Views

- Among all the drug use areas for which perceived disapproval of others was measured, the only one which showed consistent shifts over the past several years is marijuana use. At each level of use—trying once or twice, occasional use, regular use—there has been a drop in perceived disapproval for both parents and friends.
- Perceived parental and peer norms regarding most other drugs have shown either no change, or patterns of change which are not judged to be sufficiently consistent to be treated as trends.
- The one exception is cigarette smoking. More students in 1977 than 1975 (60% vs. 55%) report that if they smoked on a regular (pack-a-day) basis their friends would disapprove. This shift in perceptions of friends' disapproval may represent a convergence with reality—a reduction in pluralistic ignorance—because a consistent two-thirds of seniors since 1975 have reported that they personally disapprove of pack-a-day cigarette smoking.

Exposure to Drug Use by Friends and Others

It is generally agreed that much of youthful drug use is initiated through a peer social-learning process; and research has shown a high correlation between an individual's illicit drug use and that of his or her friends.

Exposure to Drug Use in 1978

- A comparison of responses about friends' use, and about being around people in the last 12 months who were using various drugs to get high, reveals a high degree of correspondence between these two indicators of exposure. (See Tables 15-1 and 15-3.) For each drug, the proportion of respondents saying

"none" of their friends use it is just about equal to the proportion who say that during the last 12 months they have not been around anyone who was using that drug to get high. Similarly, the proportion saying they are "often" around people getting high on a given drug is just about the same as the proportion reporting that "most" or "all" of their friends use that drug.

- Reports of exposure and friends' use closely parallel the figures on seniors' own use; it thus comes as no surprise that the highest levels of exposure involve alcohol (a majority "often" around people using it to get high) and marijuana (39% "often" and 25% "occasionally" around people using it to get high).
- What may come as a surprise is that fully 30% of all seniors say that most or all of their friends get drunk at least once a week!
- For each of the drugs, other than marijuana or alcohol, fewer than one in ten report they are "often" exposed to people using it to get high, fewer than one in five report that it occurs as much as "occasionally," and a majority (usually a large majority) report no such exposure in the previous year.

Recent Trends in Exposure to Drug Use

- During the two-year interval from 1976 to 1978, seniors' reports of exposure to marijuana use increased in just about the same proportion as percentages on actual use.⁴ (See Tables 15-2 and 15-4.)
- The other drug reflecting a consistent increase in reported exposure from 1976 to 1978 is cocaine.
- The data also show some decrease in exposure to barbiturate use and to LSD use between 1976 and 1978, paralleling the decline in actual use.
- The other drugs showed essentially steady rates of reported exposure from 1976 to 1978.

Perceived Availability in 1978

- There are substantial differences in the reported availability of the various drugs. (See Table 16-1.) In general, the more widely used drugs are reported to be available by the highest proportion of the age group, as would be expected.
- Marijuana appears to be almost universally available to high school seniors; 88% reported that they think it would be "very easy" to "fairly easy" for them to get—almost 30% more than the number who report ever having used it.

- After marihuana, the students indicate that the psychotherapeutic drugs are the most available to them: tranquilizers are seen as available to 64%, amphetamines to 59%, and barbiturates to 51%.
- 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 26% to 38%).
- Heroin is seen by the fewest seniors (16%) as fairly easy to get.

Trends in Perceived Availability

- Cocaine showed an increase of about 5% between 1977 and 1978 in easy availability as perceived by all respondents.
- Perceptions of marihuana availability have remained almost perfectly steady across the last three high school classes (at between 87% to 88% of the entire sample).
- For all of the other illicitly used drugs, the proportions of the total sample reporting easy access have declined considerably across the four high school classes; however, most of that drop occurred between 1975 and 1976.

Implications for Validity of Self-Reported Usage Questions

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

TABLE 1-1

Prevalence (Percent Ever Used) of Eleven Types of Drugs:
Observed Estimates and 95% Confidence Limits (1978)

(N=17800)

	<u>Lower limit</u>	<u>Observed estimate</u>	<u>Upper limit</u>
Marihuana	57.2	59.2	61.2
Inhalants	11.1	12.0	13.0
Hallucinogens	13.1	14.3	15.6
Cocaine	11.8	12.9	14.1
Heroin	1.3	1.6	2.0
Other opiates ^a	9.2	9.9	10.7
Stimulants ^a	21.5	22.9	24.4
Sedatives ^a	14.8	16.0	17.3
Tranquillizers ^a	15.7	17.0	18.4
Alcohol	91.8	93.1	94.2
Cigarettes	73.8	75.3	76.8

^aOnly 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 (1978)
 (N=17800)

	<u>Ever</u> <u>Used</u>	<u>Past</u> <u>month</u>	<u>Past</u> <u>year,</u> <u>not</u> <u>past</u> <u>month</u>	<u>Not</u> <u>past</u> <u>year</u>	<u>Never</u> <u>used</u>
Marihuana	59.2	37.1	13.1	9.0	40.8
Inhalants	12.0	1.5	2.6	7.9	88.0
Hallucinogens	14.3	3.9	5.7	4.7	85.7
Cocaine	12.9	3.9	5.1	3.9	87.1
Heroin	1.6	0.3	0.5	0.8	98.4
Other opiates ^a	9.9	2.1	3.9	3.9	90.1
Stimulants ^a	22.9	8.7	8.4	5.8	77.1
Sedatives ^a	16.0	4.2	5.7	6.1	84.0
Tranquillizers ^a	17.0	3.4	6.5	7.1	83.0
Alcohol	93.1	72.1	15.6	5.4	6.9
Cigarettes	75.3	36.7	{38.6} ^b		24.7

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

^bThe 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 = (9400)	Class of <u>1976</u> (15400)	Class of <u>1977</u> (17100)	Class of <u>1978</u> (17800)	'77-'78 <u>change</u>
Marihuana	47.3	52.8	56.4	59.2	+2.8 s
Inhalants	NA	10.3	11.1	12.0	+0.9
Hallucinogens	16.3	15.1	13.9	14.3	+0.4
Cocaine	9.0	9.7	10.8	12.9	+2.1 ss
Heroin	2.2	1.8	1.8	1.6	-0.2
Other opiates ^a	9.0	9.6	10.3	9.9	-0.4
Stimulants ^a	22.3	22.6	23.0	22.9	-0.1
Sedatives ^a	18.2	17.7	17.4	16.0	-1.4
Tranquillizers ^a	17.0	16.8	18.0	17.0	-1.0
Alcohol	90.4	91.9	92.5	93.1	+0.6
Cigarettes	73.6	75.4	75.7	75.3	-0.4

NOTES: Level of significance of difference between the two most recent classes:

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

NA indicates data not available.

^aOnly 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</u> <u>of</u> <u>1975</u> N = (9400)	<u>Class</u> <u>of</u> <u>1976</u> (15400)	<u>Class</u> <u>of</u> <u>1977</u> (17100)	<u>Class</u> <u>of</u> <u>1978</u> (17800)	<u>'77-'78</u> <u>change</u>
Marihuana	40.0	44.5	47.6	50.2	+2.6 <i>s</i>
Inhalants	NA	3.0	3.7	4.1	+0.4
Hallucinogens	11.2	9.4	8.8	9.6	+0.8
Cocaine	5.6	6.0	7.2	9.0	+1.8 <i>sss</i>
Heroin	1.0	0.8	0.8	0.8	0.0
Other opiates ^a	5.7	5.7	6.4	6.0	-0.4
Stimulants ^a	16.2	15.8	16.3	17.1	+0.8
Sedatives ^a	11.7	10.7	10.8	9.9	-0.9
Tranquilizers ^a	10.6	10.3	10.8	9.9	-0.9
Alcohol	84.8	85.7	87.0	87.7	+0.7
Cigarettes	NA	NA	NA	NA	NA

NOTES: Level of significance of difference between the two most recent classes:

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

NA indicates data not available.

^aOnly 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 = (9400)	<u>Class of 1976</u> (15400)	<u>Class of 1977</u> (17100)	<u>Class of 1978</u> (17800)	<u>'77-'78 change</u>
Marhuana	27.1	32.2	35.4	37.1	+1.7
Inhalants	NA	0.9	1.3	1.5	+0.2
Hallucinogens	4.7	3.4	4.1	3.9	-0.2
Cocaine	1.9	2.0	2.9	3.9	+1.0 <i>sss</i>
Heroin	0.4	0.2	0.3	0.3	0.0
Other opiates ^a	2.1	2.0	2.8	2.1	-0.7 <i>ss</i>
Stimulants ^a	8.5	7.7	8.8	8.7	-0.1
Sedatives ^a	5.4	4.5	5.1	4.2	-0.9 <i>ss</i>
Tranquillizers ^a	4.1	4.0	4.6	3.4	-1.2 <i>sss</i>
Alcohol	68.2	68.3	71.2	72.1	+0.9
Cigarettes	36.7	38.8	38.4	36.7	-1.7 <i>s</i>

NOTES: Level of significance of difference between the two most recent classes:

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

NA indicates data not available.

^aOnly 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 ^b				
	Class of 1975 N = (9400)	Class of 1976 (15400)	Class of 1977 (17100)	Class of 1978 (17800)	'77-'78 change
Marihuana	6.0	8.2	9.1	10.7	+1.6 <i>ss</i>
Inhalants	NA	0.0	0.0	0.1	+0.1
Hallucinogens	0.1	0.1	0.1	0.1	0.0
Cocaine	0.1	0.1	0.1	0.1	0.0
Heroin	0.1	0.0	0.0	0.0	0.0
Other opiates ^a	0.1	0.1	0.2	0.1	-0.1
Stimulants ^a	0.5	0.4	0.5	0.5	0.0
Sedatives ^a	0.3	0.2	0.2	0.2	0.0
Tranquillizers ^a	0.1	0.2	0.3	0.1	-0.2 <i>sss</i>
Alcohol	5.7	5.6	6.1	5.7	-0.4
Cigarettes	26.9	28.8	28.8	27.5	-1.3

NOTES: Level of significance of difference between the two most recent classes:

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

NA indicates data not available.

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

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

TABLE 1-7

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

Percent who used only marihuana
in last twelve months

	Number of Cases (Class of 1978)	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 <i>change</i>
All seniors	17800	18.8	22.7	25.1	26.7	+1.6
Sex:						
Male	8200	23.1	26.9	29.1	30.7	+1.6
Female	9000	15.2	18.6	21.5	23.1	+1.6
College Plans:						
None or under 4 yrs	7500	NA	21.9	24.3	25.5	+1.2
Complete 4 yrs	8900	NA	23.4	26.0	27.8	+1.8
Region:						
Northeast	4600	25.5	29.2	29.1	30.8	+1.7
North Central	5400	16.3	21.5	24.2	27.8	+3.6 ^s
South	5000	15.6	18.9	23.2	23.6	+0.4
West	2800	20.1	23.1	24.0	24.5	+0.5
Population Density:						
Large SMSA	5500	24.2	27.2	29.2	30.0	+0.8
Other SMSA	8100	18.7	22.0	25.6	27.2	+1.6
Non-SMSA	4200	15.4	10.4	21.0	23.3	+2.3

NOTES: Level of significance of difference between the two most recent classes:

^s = .05, ^{ss} = .01, ^{sss} = .001.

Number of cases for all previous years 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 1978)	Percent who used some other illicit drug in last twelve months ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	26.2	25.4	26.0	27.1	+1.1	
Sex:							
Male	8200	25.9	25.7	26.3	27.9	+1.6	
Female	9000	26.2	24.4	25.3	25.7	+0.4	
College Plans:							
None or under 4 yrs	7500	NA	28.7	30.0	30.1	+0.1	
Complete 4 yrs	8900	NA	20.9	20.8	22.7	+1.9 s	
Region:							
Northeast	4600	26.0	26.1	27.7	30.8	+3.1	
North Central	5400	29.2	26.1	27.7	26.8	-0.9	
South	5000	22.5	23.4	22.9	24.0	+1.1	
West	2800	28.2	26.6	26.0	28.8	+2.8	
Population Density:							
Large SMSA	5500	30.3	27.5	27.1	30.3	+3.2 s	
Other SMSA	8100	26.3	25.8	26.8	27.3	+0.5	
Non-SMSA	4200	23.4	23.3	24.2	24.2	0.0	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aUse 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 Marijuana and Use of any Other Illicit Drug^a

	<u>Percent reporting use in lifetime</u>				
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	<u>'77-'78 change</u>
Marihuana Only	19.0	22.9	25.8	27.6	+1.8
Any Illicit Drug Other Than Marihuana ^a	36.2	35.4	35.8	36.5	+0.7
Total: Any Illicit Drug Use	55.2	58.3	61.6	64.1	+2.5 <i>s</i>
	N = (9400)	(15500)	(17200)	(17800)	
	<u>Percent reporting use in the last twelve months</u>				
Marihuana Only	18.8	22.7	25.1	26.7	+1.6
Any Illicit Drug Other Than Marihuana ^a	26.2	25.4	26.0	27.1	+1.1
Total: Any Illicit Drug Use	45.0	48.1	51.1	53.8	+2.7 <i>s</i>
	N = (9300)	(15200)	(16900)	(17800)	

NOTES: Level of significance of difference between the two most recent classes:

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

See Appendix D for definition of variables in table.

^aUse 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 1978

	Marihuana	Inhalants	Hallucinogens	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Tranquilizers	Alcohol	Cigarettes ^a
All seniors	50.2	4.1	9.6	9.0	0.8	6.0	17.1	9.9	9.9	87.7	18.8
Sex:											
Male	55.9	5.6	11.6	11.4	1.1	6.9	16.9	10.6	9.7	90.0	18.9
Female	44.3	2.8	7.3	6.5	0.6	5.1	17.1	9.0	10.1	85.7	18.0
College Plans:											
None or under 4 yrs	51.6	5.0	11.0	9.5	1.0	6.8	20.0	10.8	11.1	88.0	25.5
Complete 4 yrs	47.1	3.4	7.3	7.7	0.6	4.9	13.7	8.5	8.6	87.6	11.1
Region:											
Northeast	59.2	4.4	13.0	11.8	0.6	6.8	19.6	11.7	10.9	92.5	23.6
North Central	51.6	4.8	10.7	8.5	0.8	6.7	18.2	9.2	8.8	91.0	19.8
South	42.7	3.6	6.3	6.8	1.1	4.5	14.0	9.9	10.5	83.2	17.0
West	49.1	3.6	9.6	10.7	0.8	6.7	17.8	8.4	8.9	82.8	12.2
Population Density:											
Large SMSA	57.2	3.4	11.9	12.3	0.7	6.9	17.7	10.2	10.3	90.7	19.7
Other SMSA	50.8	3.7	9.0	8.9	0.8	5.9	17.5	10.3	10.1	87.8	17.9
Non-SMSA	43.3	5.3	8.3	6.4	1.0	5.4	16.0	9.1	9.2	85.0	19.3

NOTES: Number of cases can be found in Appendix C.

See Appendix D for definition of variables in table.

^aBased on 30-day prevalence of a half pack a day of cigarettes, or more. Annual prevalence is not available.

TABLE 1-11

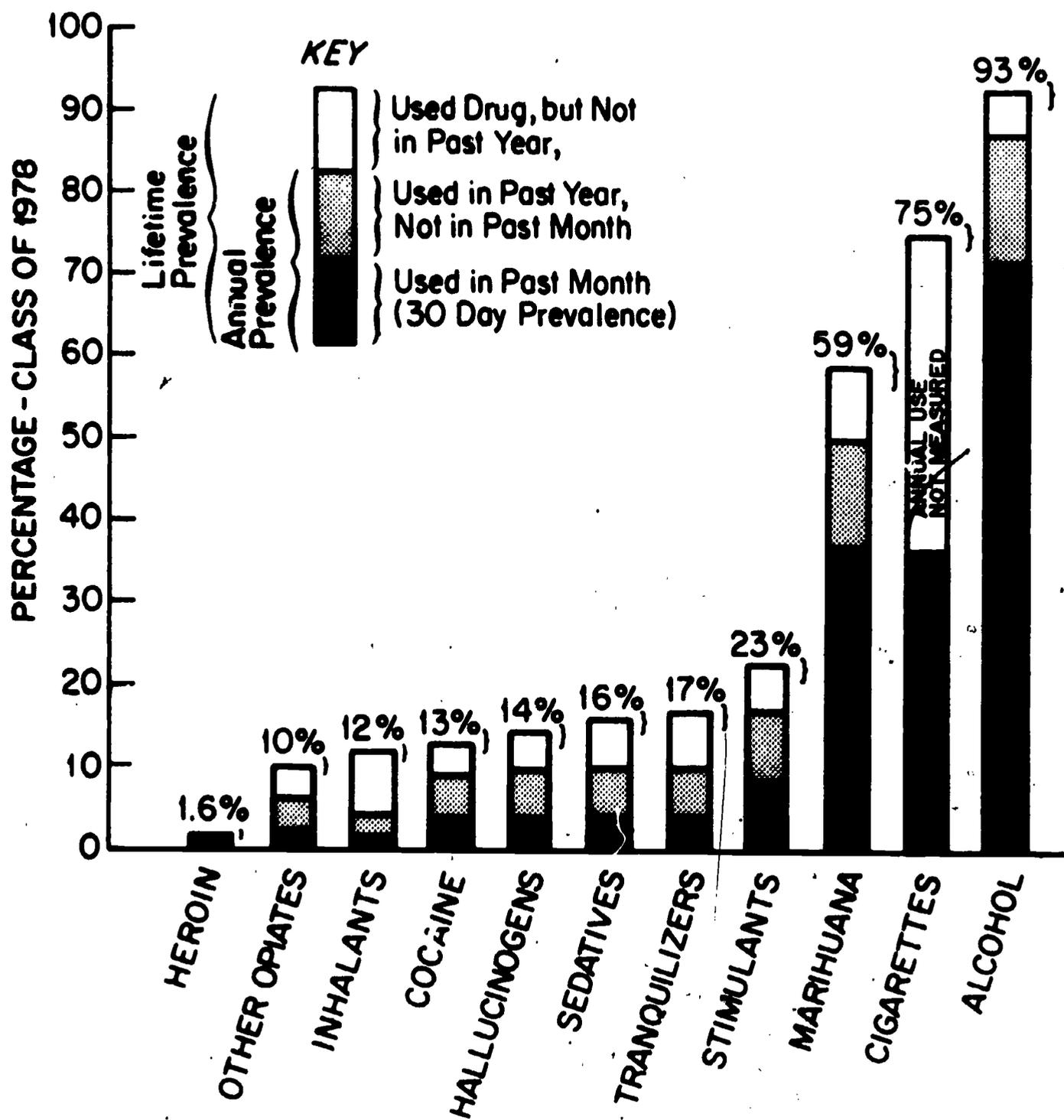
Grade of First Use for Eleven Types of Drugs, Class of 1978

Grade in which drug was first used:	Marihuana	Inhalants	Hallucinogens	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Tranquilizers	Alcohol	Cigarettes (Daily)
12th	5.6	1.1	1.9	3.7	0.3	1.7	3.4	2.2	1.8	6.2	1.8
11th	10.8	1.7	3.3	4.6	0.4	2.5	6.0	3.8	4.1	12.9	4.3
10th	14.5	1.7	3.7	2.4	0.3	2.5	6.1	4.3	4.2	18.2	5.6
9th	14.5	2.9	3.3	1.6	0.3	1.7	5.2	3.5	4.2	24.1	7.5
7-8th	12.0	3.0	1.7	0.5	0.1	1.2	1.9	1.9	2.0	22.5	9.3
6th	1.7	1.7	0.3	0.1	0.1	0.3	0.1	0.3	0.7	9.1	3.5
Never used	40.8	88.0	85.7	87.1	98.4	90.1	77.1	84.0	83.0	6.9	68.0

NOTE: This question was asked in two of the five forms (N = approximately 6,000), except for inhalants which were asked about in only one form (N = approximately 3,000).

FIGURE A

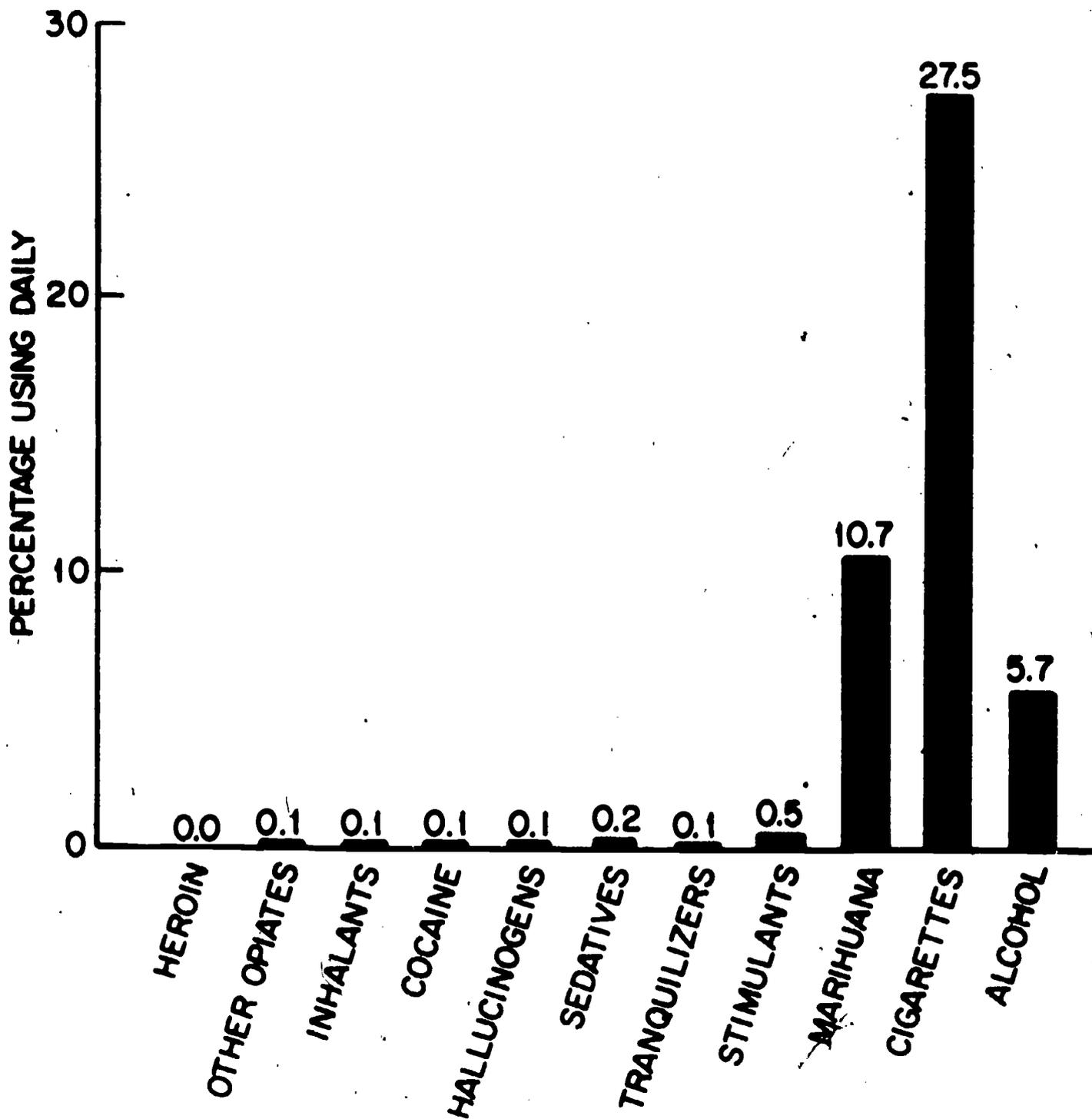
Lifetime, Annual, and Thirty-Day Prevalence of Use (and Recency of Use) for Eleven Types of Drugs, Class of 1978



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

FIGURE B

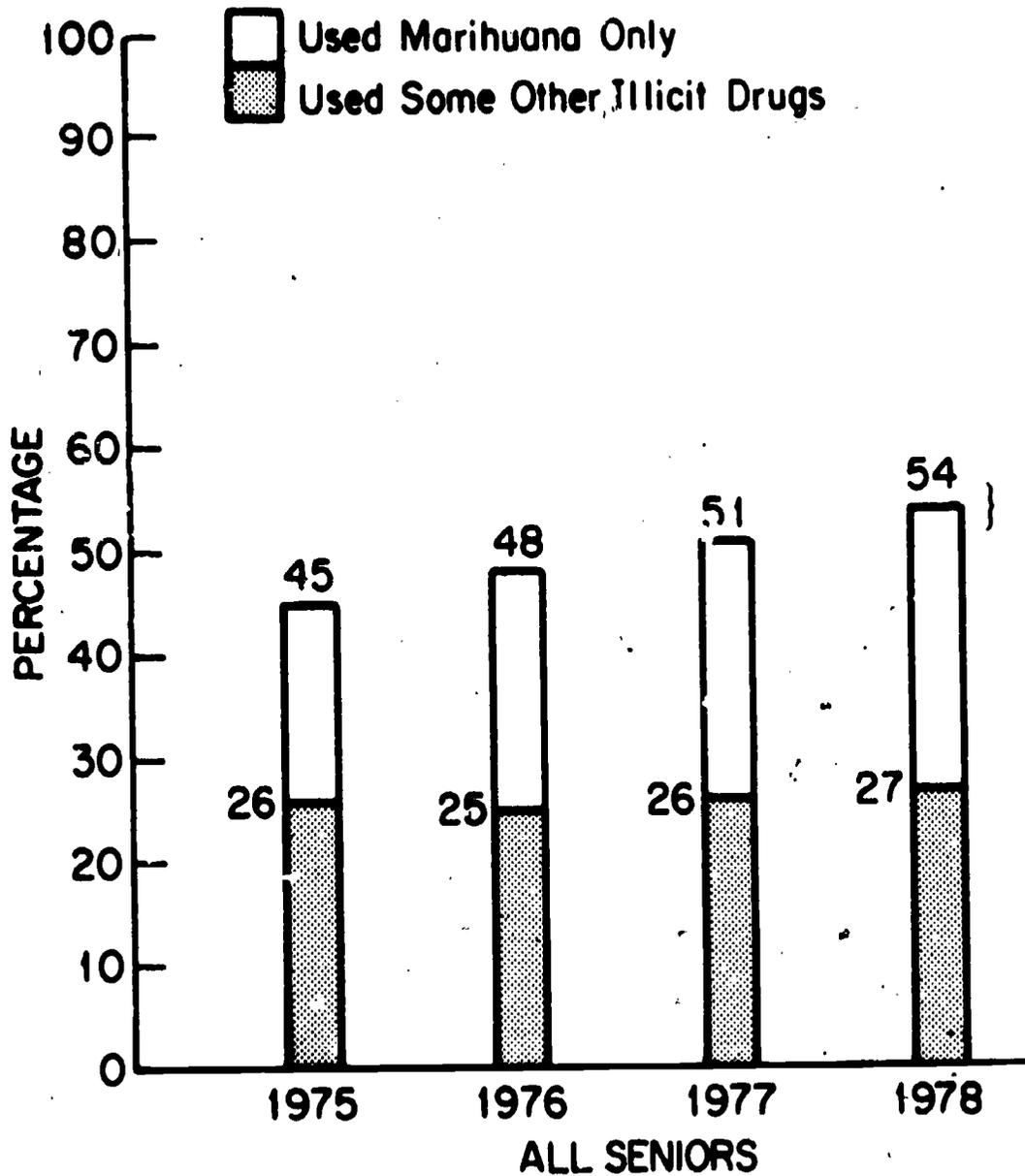
Thirty-Day Prevalence of Daily Use for
Eleven Types of Drugs, Class of 1978



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

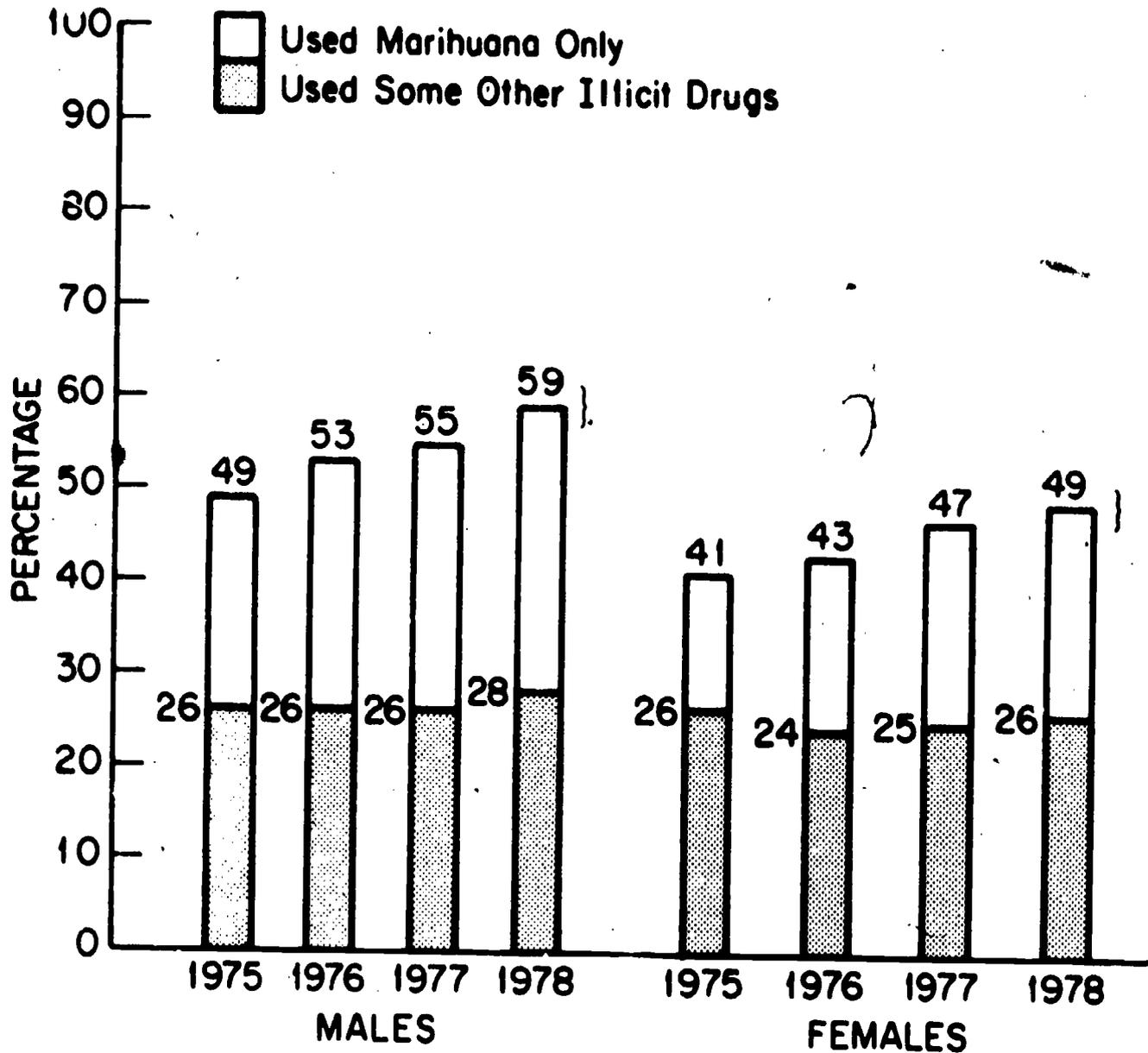


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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

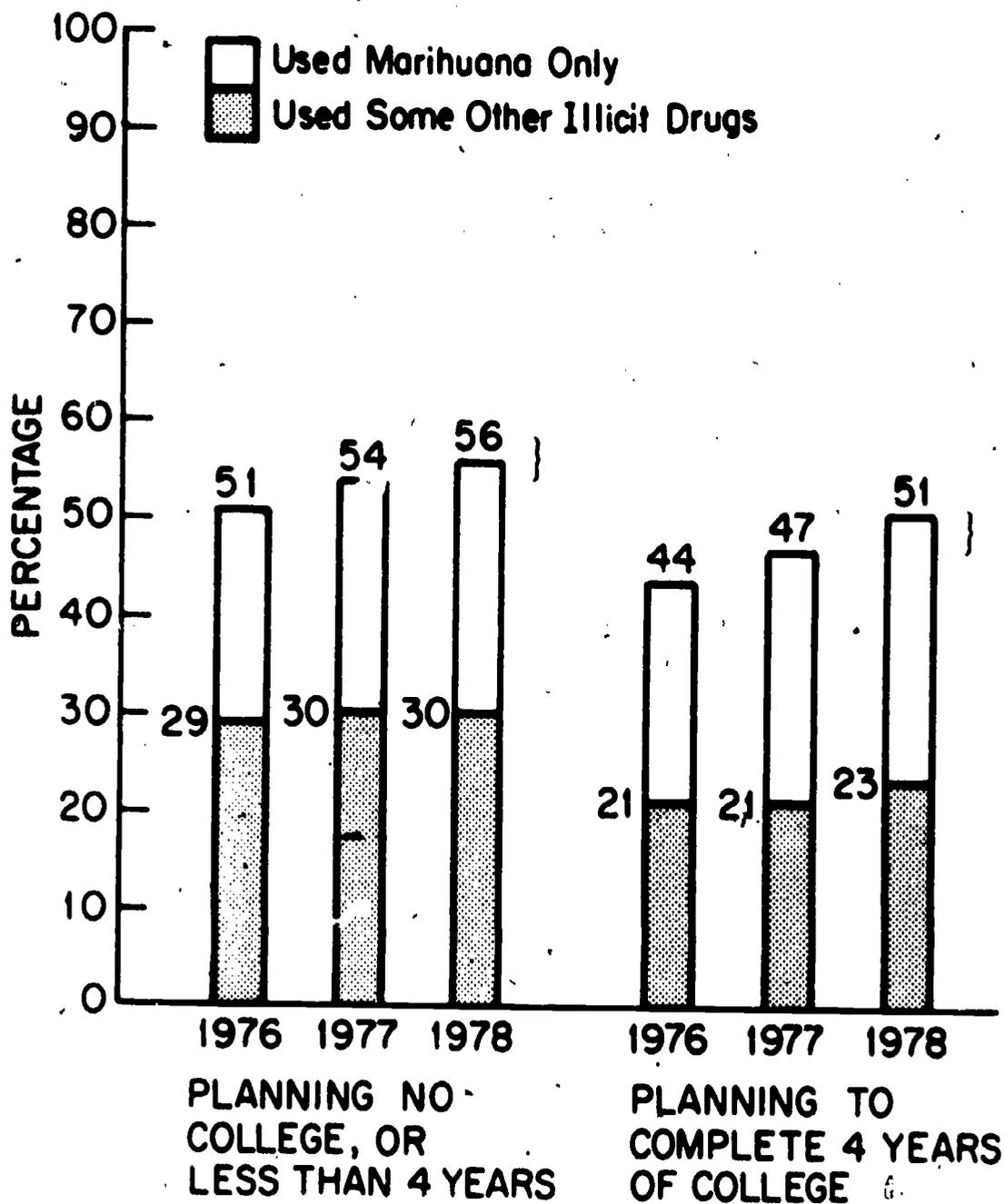


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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

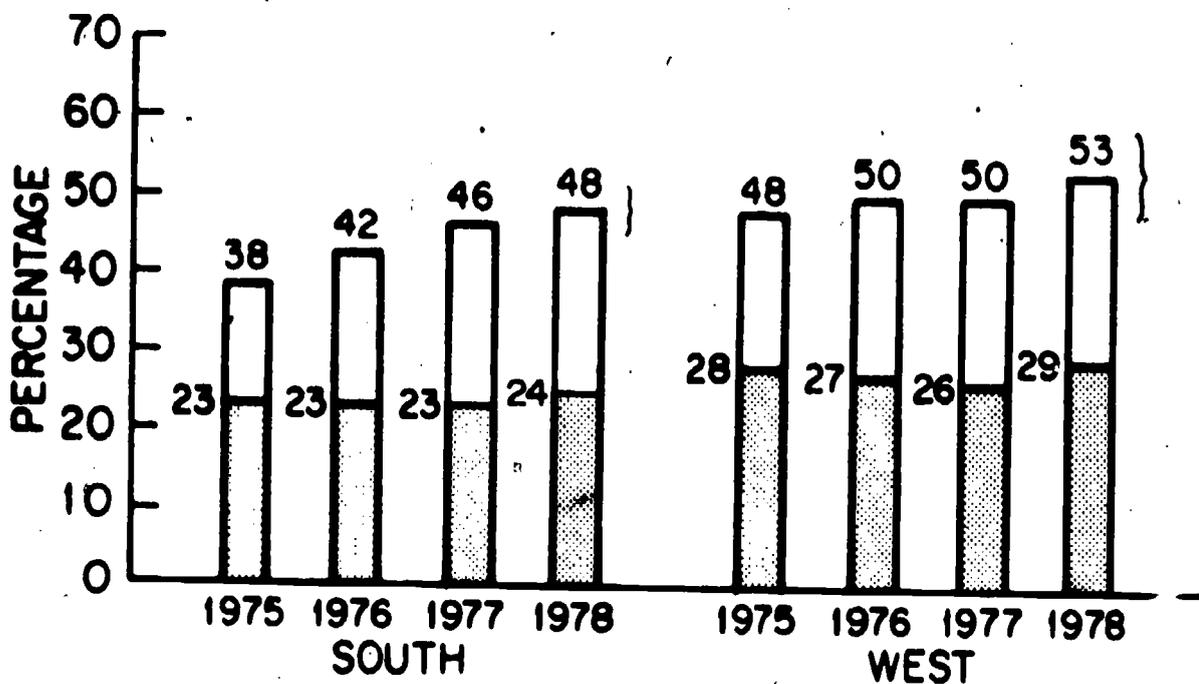
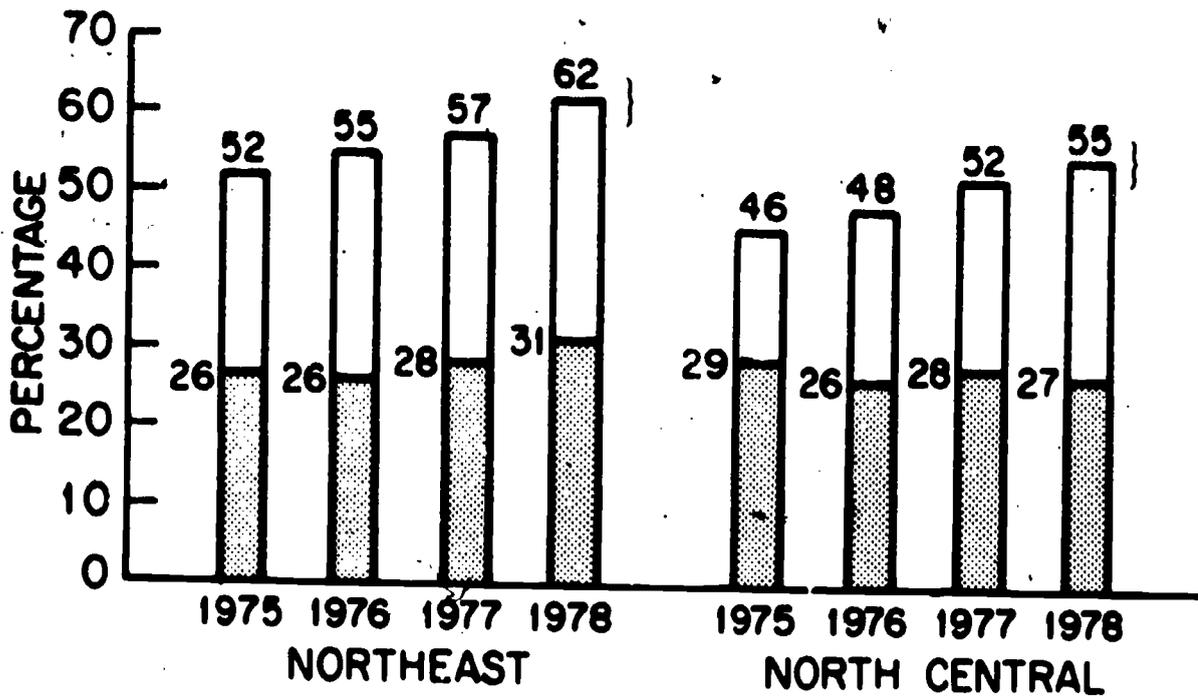


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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



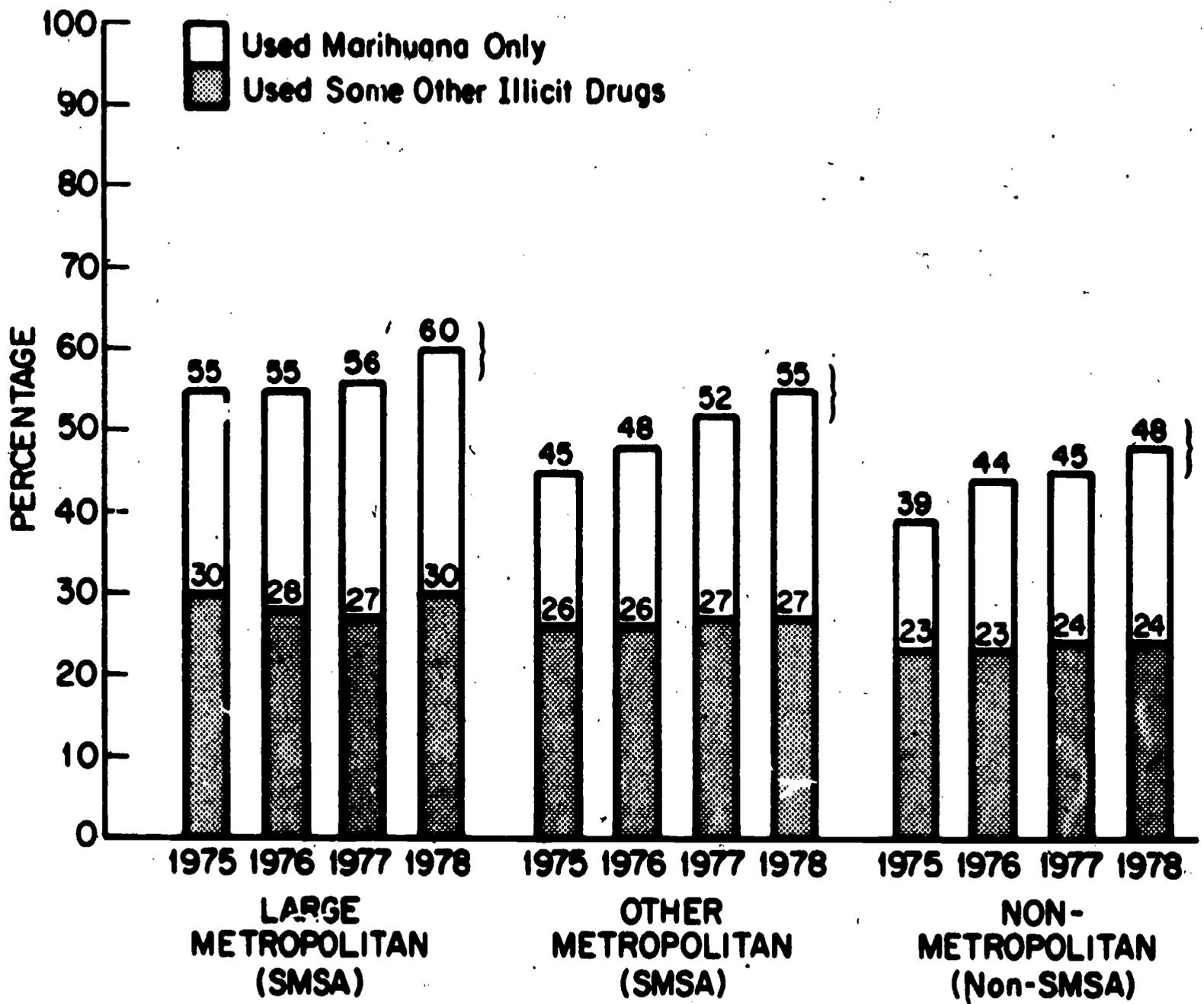
Used Marijuana Only
 Used Some Other Illicit Drugs

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

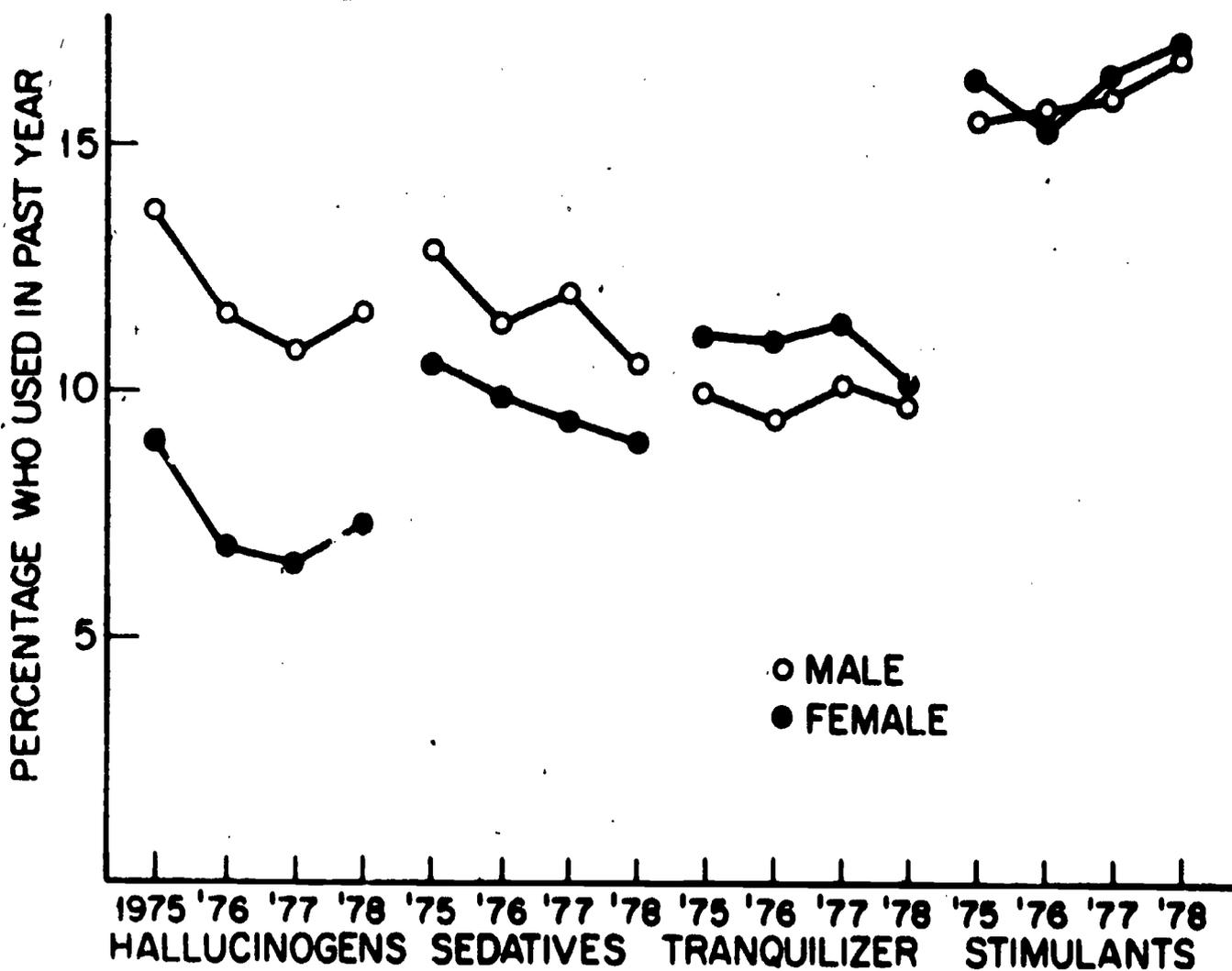
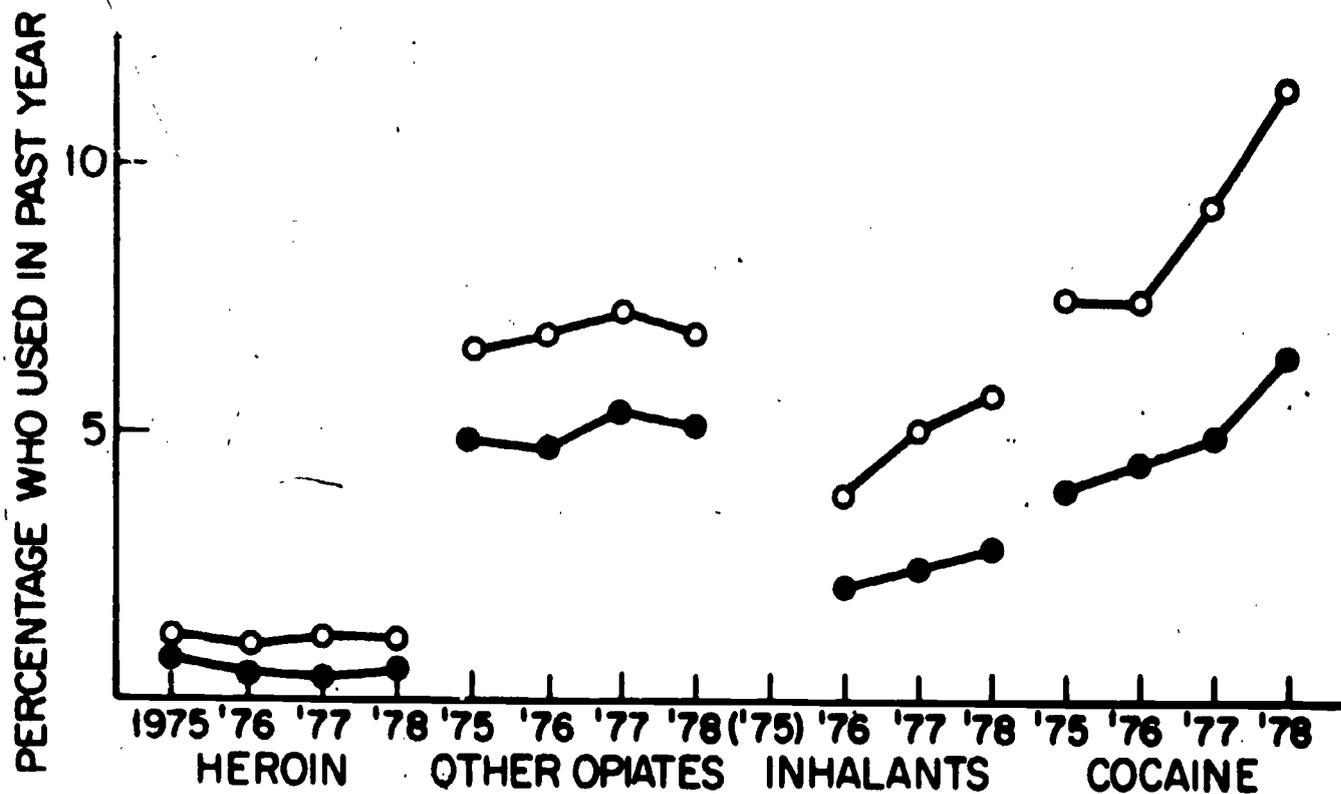


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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



○ MALE
● FEMALE

FIGURE 1

Trends in Annual Prevalence of Marihuana and Alcohol, by Sex

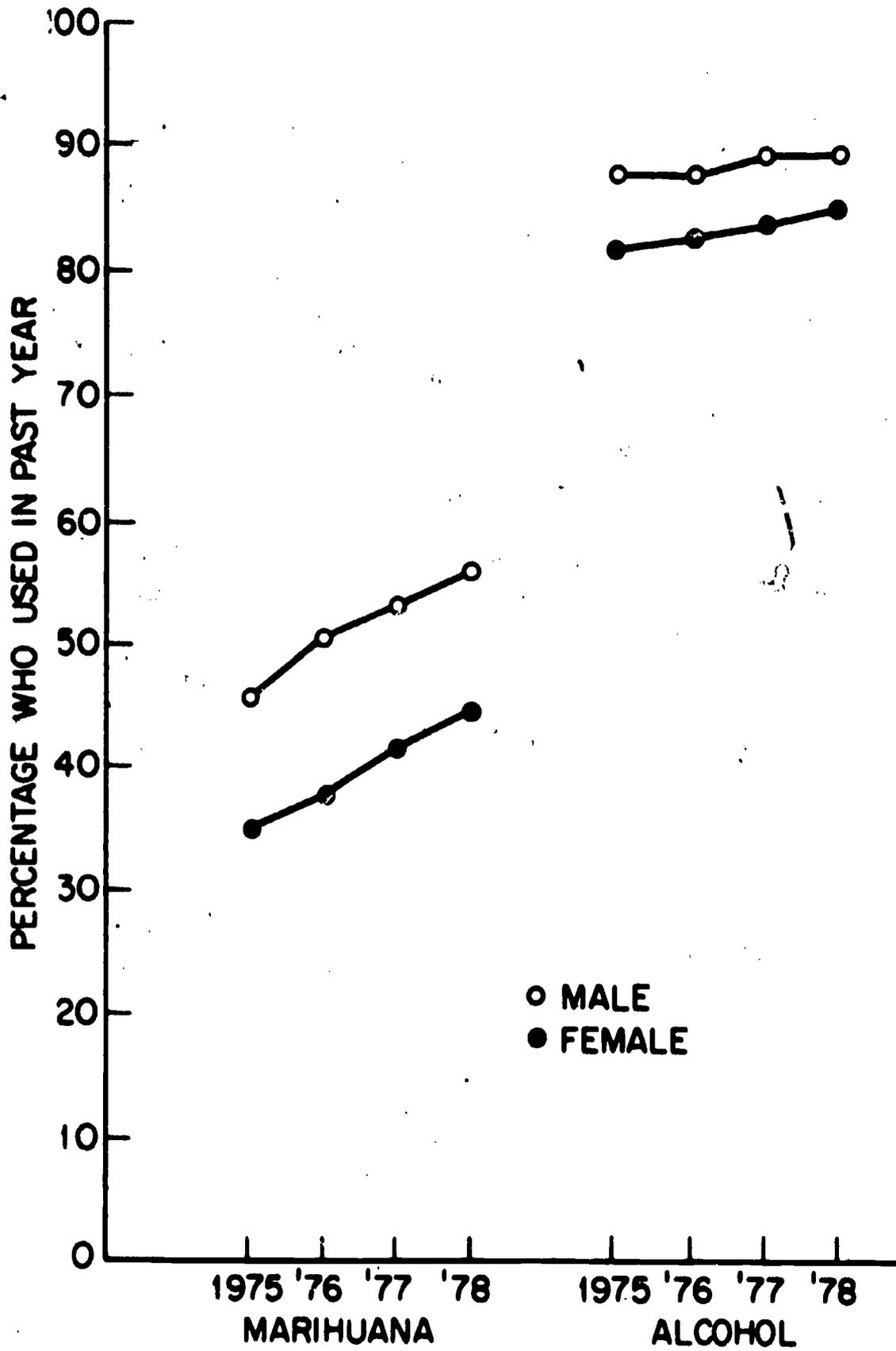
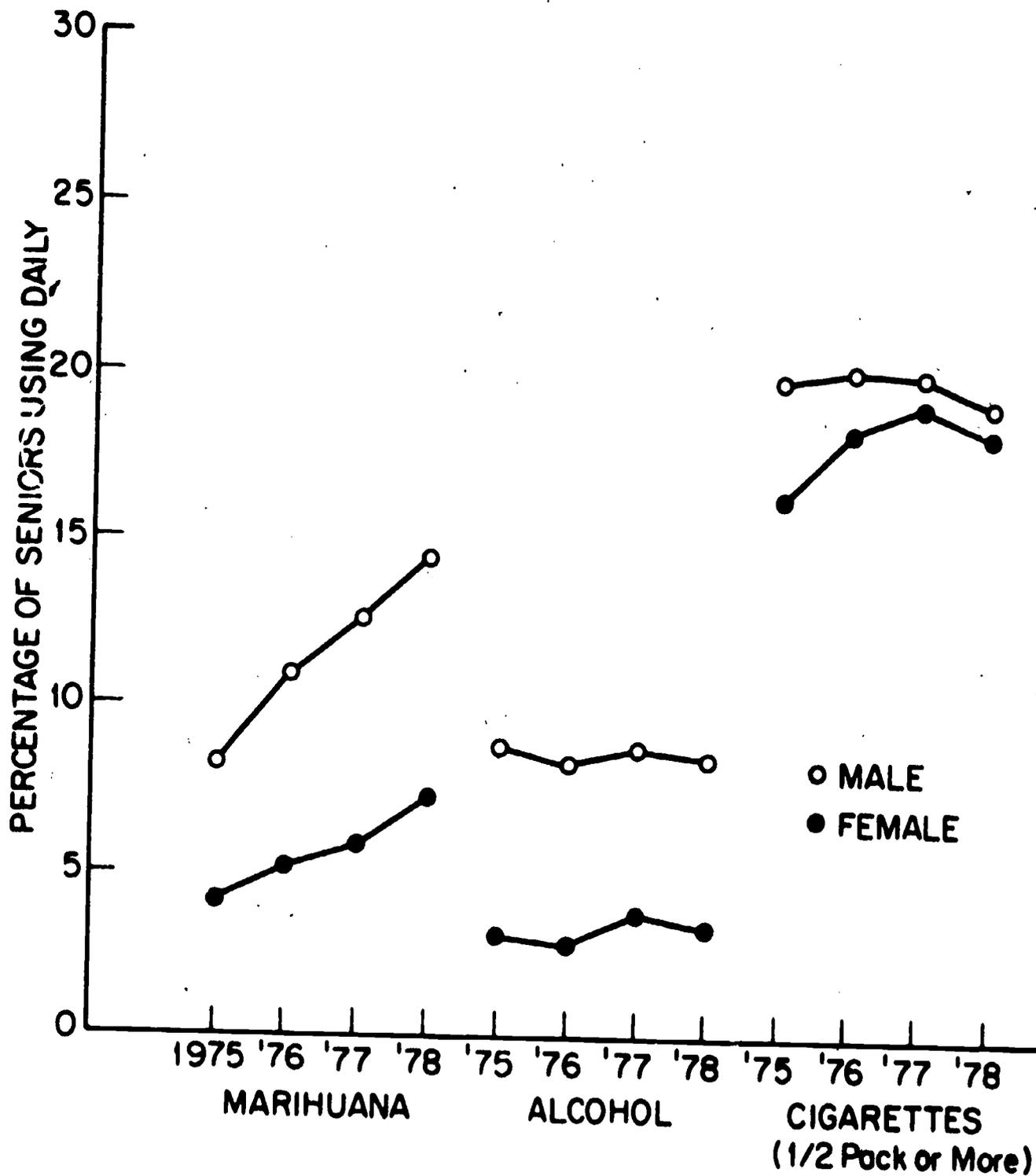


FIGURE J

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

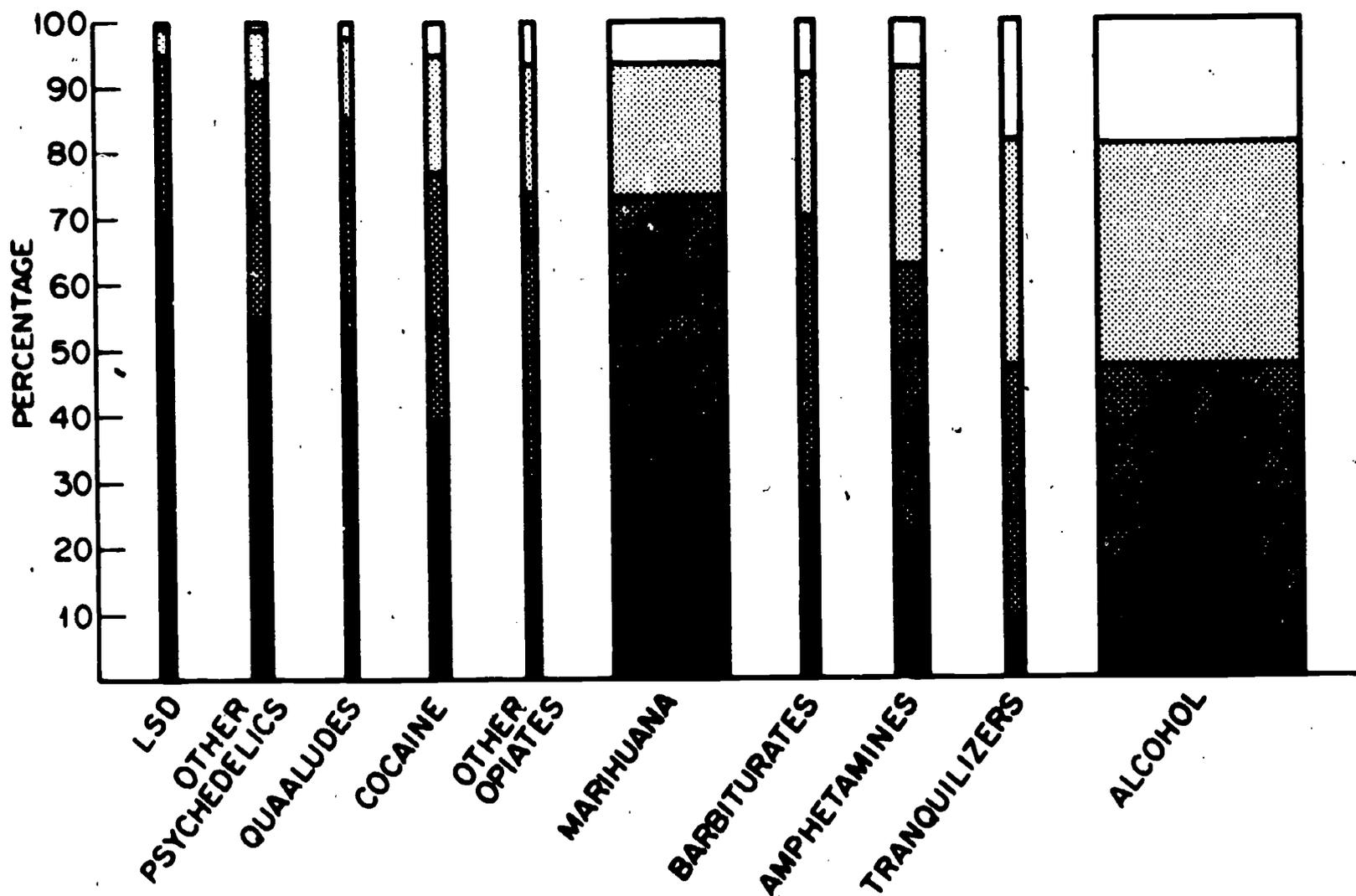
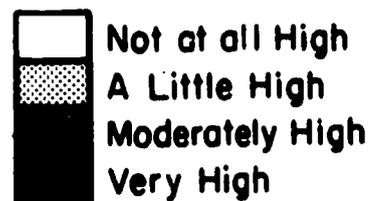


NOTE: Daily use for alcohol and marihuana is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking a half-pack or more per day in the past thirty days.

FIGURE K

Proportions of Recent Users who Usually Attain Each Level of Feeling High

KEY:



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

Chapter 2

MARIHUANA/HASHISH

A significant proportion of the age group under study is now using marihuana and/or hashish on a daily (or near-daily) basis, as the figures below demonstrate. Because of this fact, a supplementary table is included in 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.

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 still accounts for the majority of the use and the users in this drug class.

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

Prevalence of Use in 1978

Total Sample

Table(s)

- Over half of all seniors (about 59%) have tried marihuana or hashish, and half (about 50%) report use in the prior year. 2,3
- Over one-third (about 37%) had used it in the last month. 4
- One-third (33%) had used it on 20 or more occasions in their lifetime. 6
- Over one-quarter of the sample (28%) report about weekly use or more (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 now reported by 10.7% of the sample. 6

Subgroup Differences

- Sex Differences. Prevalence for all three time intervals is higher among males than females. (For example, annual prevalence is reported by 56% of the males and 44% of the 2,3,4,5,10

Table(s)

females.) An even greater difference occurs between the sexes when use on 40 or more occasions during the last year is compared. (About 23% of the males and 12% of the females report usage of this frequency.) Also, twice as many males (about 14%) as females (about 7%) report daily use.

- College Plans. Use is more widespread among the noncollege-bound than among the college-bound (52% vs. 47% in annual prevalence). Again the differences are more pronounced for frequent use; about 14% of the college-bound have used 40 or more times in the previous year vs. about 20% of the noncollege-bound. Similarly, only 7% of the college-bound report daily use vs. 13% 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 59%, respectively, for annual prevalence). There is also considerable regional variation in the observed levels of daily use with 14.5% using daily in the Northeast vs. 8.2% in the West. 2,3,4,10
- Population Density. Prevalence is lowest in the nonmetropolitan areas (non-SMSAs show about 43% annual prevalence) and highest in the very large cities. (Large SMSAs have 57% annual prevalence.) The prevalence of daily use is also slightly lower than average (at 9.0%) in the nonmetropolitan areas. 2,3,4,10

Recent Trends in PrevalenceTotal Sample

- Since 1975, there has been a continuing upward trend in the prevalence figures based on all three time intervals (lifetime, last year, last 30 days). 2,3,4
- Observed lifetime prevalence has risen from 47% in 1975 to 59% in 1978—a difference of 12%. 2
- Observed annual prevalence and monthly prevalence increased almost as much. 3,4
- Of most importance, there has been a continuing increase in daily marijuana/hashish use (i.e., 20 or more occasions in the last 30 days) since 1975. Of the 1975 seniors, 6.0% reported daily use. The number of seniors who are daily users rose to 8.2% in 1976, 9.1% in 1977, and 10.7% in 1978. This represents nearly a two-fold increase between 1975 and 1978, significant at .001 level. 10

Subgroup Differences in TrendsTable(s)

- With one minor exception, all subgroups show a continuing increase in the prevalence of marihuana/hashish use since 1975, in terms of all three prevalence rates (lifetime, annual, and monthly). The exception is Southern seniors, who showed a slight (non-significant) decrease in thirty-day prevalence between 1977 and 1978. 2,3,4
- Increases this year were greatest in the Northeast and the North Central regions of the country, and smallest in the South, thus reestablishing regional differences which seemed to be narrowing based on the 1977 data. 2,3,4
- Daily use has increased for all subgroups between 1975 and 1978. During this period, the increases have been greatest among males and the noncollege-bound. Between 1977 and 1978 larger than average increases occurred in the Northeast and in large cities, thus countering the narrowing of regional and urban differences exhibited between 1975 and 1977. 10

Use at Earlier Grade Levels

- First use for most users tended to occur between ninth and eleventh grade. This has been true for all four cohorts (graduating classes) as Figure 2 illustrates. 8
Fig 2
- There has been a substantial and continuing increase in the prevalence of early use. Each cohort has attained a higher prevalence level than the preceding cohorts by sixth grade, and has remained higher than the preceding cohorts at each grade level thereafter. In the class of 1975 only 17% reported any use prior to tenth grade. The proportion has risen steadily to 28% by the class of 1978. 8,9
Fig 2
- Stated differently, as illustrated in Figure 1: for the years for which we can reconstruct prevalence estimates using the retrospective data from these four graduating classes, marihuana use has been going up at all grade levels. This is suggestive of a secular trend or period effect—an effect which applies across various ages in a given historical period. (Note that these retrospective estimates of lifetime prevalence for each grade level are based only on the segment of each cohort who remained in school to the end of twelfth grade—roughly 80% to 85%.) Fig 1
- Subgroups differences in early use of marihuana tend to follow differences in overall use; the subgroups with the highest overall percentages of marihuana use also show the 8

Table(s)

highest percentages of users at earlier grade levels.

- The increase in early prevalence has also been reflected among all subgroups, although some of the groups which showed the fastest increase in the earlier years (males, the noncollege-bound) did not show much change between the classes of 1977 and 1978. Their counterparts (females and the college-bound) continue to report a rise in early prevalence, thus beginning to close a previously existing gap. In fact, it should be noted that several subgroups which historically have had high prevalence rates (males, the noncollege-bound, those in the West, and those in large cities) are showing evidence of stabilizing at between 30% and 33% lifetime prevalence at the end of ninth grade. Further, given the time lag in such retrospective reports, this stabilization would have occurred two to four years ago.

9

Probability of Future Use

- Just over one-quarter (28%) of 1978 seniors say they "probably" or "definitely" will be using marihuana five years in the future.
- This reflects more than an 8% increase over 1975, but almost no change from last year.
- The proportion expecting to use it in the future is substantially smaller than the proportion who reported actual use during the previous 30 days—apparently some of the current users view the current usage phase in their lives as transitory.

6

6

6

Degree and Duration of Highs

- On one of the questionnaire forms, seniors who reported using any marihuana during the prior twelve months were asked to state how high they usually got when they used it and how long they stayed high.
- Asked to rate how high they usually get on marihuana, about half of the users (47%) say "moderately high," and about one in four say they usually get "very high." These proportions have shown virtually no systematic change over the last four years.
- The modal time interval for being high—that is, the one most frequently chosen—is one to two hours (reported by 47% of users). Most other users (39%) say they usually stay high for 3 to 6 hours, but a few (5% to 6% over the last four years) say they usually stay high for 7 hours or longer.

11

11

Table(s)

11

- The proportion of users who report that they usually stay high for more than 2 hours has declined somewhat from 1975 (52%) to 1978 (45%).
- In sum, one could infer from these subjective reports that the quantity of the active ingredient, THC, ingested on the average occasion in which marihuana is used, has declined. This finding stands in apparent contradiction to the assertions recently made in the media ("Reading, Writing, and Reefer," NBC News, December 10, 1978) that the strength of marihuana sold on the street has increased many fold in the last few years. About the only way the facts presented here could be reconciled with that assertion is if the bulk quantity of marihuana/hashish smoked on the average occasion has been going down as the strength has been going up.
- Users from the different subgroups (defined in terms of sex, college plans, region, and urbanicity) show rather similar patterns of responses to the questions concerning the degree and duration of feeling high.

12,14

TABLE 2-1

Marihuana: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17900	59.2	37.1	13.1	9.0	40.8
Sex:						
Male	8200	64.4	42.6	13.3	8.5	35.6
Female	9000	53.9	31.3	13.0	9.6	46.1
College Plans:						
None or under 4 yrs	7500	61.4	39.2	12.4	9.8	38.6
Complete 4 yrs	8900	55.5	33.2	13.9	8.4	44.5
Region:						
Northeast	4600	66.7	46.7	12.5	7.5	33.3
North Central	5400	60.6	37.8	13.8	9.0	39.4
South	5000	52.4	30.6	12.1	9.7	47.6
West	2800	59.0	34.3	14.8	9.9	41.0
Population Density:						
Large SMSA	5500	66.2	44.0	13.2	9.0	33.8
Other SMSA	8100	60.2	37.1	13.7	9.4	39.8
Non-SMSA	4200	51.9	31.4	11.9	8.6	48.1

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 1978)	Percent ever used				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	47.3	52.8	56.4	59.2	+2.8 s
Sex:						
Male	8200	52.7	58.9	61.9	64.4	+2.5 s
Female	9000	42.7	46.1	50.8	53.9	+3.1 s
College Plans:						
None or under 4 yrs	7500	NA	55.3	59.6	61.4	+1.8
Complete 4 yrs	8900	NA	48.7	52.0	55.5	+3.5 s
Region:						
Northeast	4600	56.3	60.7	62.5	66.7	+4.2 s
North Central	5400	46.9	52.1	56.0	60.6	+4.6 s
South	5000	38.8	45.7	51.4	52.4	+1.0
West	2800	52.5	55.9	57.1	59.0	+1.9
Population Density:						
Large SMSA	5500	58.1	60.1	62.5	66.2	+3.7 s
Other SMSA	8100	48.1	52.3	57.7	60.2	+2.5
Non-SMSA	4200	39.6	47.8	49.7	51.9	+2.2

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>				<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	
All seniors	17800	40.0	44.5	47.6	50.2	+2.6 <i>s</i>
Sex:						
Male	8200	45.8	50.6	53.2	55.9	+2.7 <i>s</i>
Female	9000	34.9	37.8	42.0	44.3	+2.3
College Plans:						
None or under 4 yrs	7500	NA	46.8	50.7	51.6	+0.9
Complete 4 yrs	8900	NA	40.7	43.4	47.1	+3.7 <i>ss</i>
Region:						
Northeast	4600	47.4	52.7	53.5	59.2	+5.7 <i>ss</i>
North Central	5400	40.1	44.0	48.1	51.6	+3.5
South	5000	32.4	37.9	42.5	42.7	+0.2
West	2800	44.1	45.8	46.8	49.1	+2.3
Population Density:						
Large SMSA	5500	50.4	51.3	53.2	57.2	+4.0 <i>s</i>
Other SMSA	8100	40.3	44.2	48.9	50.8	+1.9
Non-SMSA	4200	32.9	39.8	41.2	43.3	+2.1

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>				<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	
All seniors	17800	27.1	32.2	35.4	37.1	+1.7
Sex:						
Male	8200	32.3	37.7	40.7	42.6	+1.9
Female	9000	22.5	26.0	30.0	31.3	+1.3
College Plans:						
None or under 4 yrs	7500	NA	34.5	38.7	39.2	+0.5
Complete 4 yrs	8900	NA	28.4	31.0	33.2	+2.2
Region:						
Northeast	4600	32.2	38.6	40.4	46.7	+6.3 ⁸⁸
North Central	5400	27.6	31.4	36.1	37.8	+1.7
South	5000	21.2	27.7	31.3	30.6	-0.7
West	2800	30.8	32.7	33.6	34.3	+0.7
Population Density:						
Large SMSA	5500	36.2	37.9	40.4	44.0	+3.6 ⁸
Other SMSA	8100	26.4	32.5	36.2	37.1	+0.9
Non-SMSA	4200	22.2	27.5	30.2	31.4	+1.2

NOTES: Level of significance of difference between the two most recent classes:

⁸ = .05, ⁸⁸ = .01, ⁸⁸⁸ = .001.

Number of cases for all previous years 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 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	49.8	8.9	6.5	5.4	6.1	5.8	17.5
Sex:								
Male	8200	44.1	9.1	6.8	5.4	6.0	5.9	22.8
Female	9000	55.7	8.6	6.1	5.5	6.3	5.8	12.0
College Plans:								
None or under 4 yrs	7500	48.4	8.5	6.2	5.4	6.1	5.9	19.5
Complete 4 yrs	8900	52.9	9.2	6.7	5.6	6.1	5.5	14.2
Region:								
Northeast	4600	40.8	7.9	6.8	5.8	8.2	7.3	23.2
North Central	5400	48.4	9.6	7.0	5.9	6.2	5.3	17.6
South	5000	57.3	8.2	5.7	5.1	4.7	5.2	13.8
West	2800	50.9	10.5	6.8	4.6	5.4	5.8	16.1
Population Density:								
Large SMSA	5500	42.8	8.9	6.6	6.1	7.3	7.1	21.3
Other SMSA	8100	49.2	9.1	7.0	5.2	6.0	5.9	17.6
Non-SMSA	4200	56.7	8.5	5.7	5.2	5.3	4.6	14.1

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>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	52.7	47.2	43.6	40.8
1-2 occasions	8.8	9.0	9.1	9.1
3-5 occasions	5.1	5.4	6.1	6.1
6-9 occasions	4.0	4.0	4.7	4.8
10-19 occasions	5.4	5.9	6.5	6.4
20-39 occasions	5.1	5.6	5.8	6.2
40 or more	18.9	22.9	24.3	26.6
	N = (9841)	(15845)	(17555)	(18073)
<u>Use in last twelve months</u>				
No occasions	60.0	55.5	52.4	49.8
1-2 occasions	8.7	8.6	8.9	8.9
3-5 occasions	5.2	5.9	6.5	6.5
6-9 occasions	4.3	4.7	5.1	5.4
10-19 occasions	5.5	5.8	6.3	6.1
20-39 occasions	4.5	5.1	5.6	5.8
40 or more	11.7	14.3	15.1	17.5
	N = (9792)	(15748)	(17490)	(18009)
<u>Use in last thirty days</u>				
No occasions	72.9	67.8	64.6	62.9
1-2 occasions	7.7	8.3	9.6	9.2
3-5 occasions	4.8	5.4	5.8	6.0
6-9 occasions	4.0	4.7	5.0	4.6
10-19 occasions	4.6	5.7	5.9	6.7
20-39 occasions	3.2	4.3	4.5	5.4
40 or more	2.8	3.9	4.6	5.3
	N = (9796)	(15722)	(17473)	(18014)
<u>Probability of future use</u>				
Definitely will not	58.8	53.3	50.5	49.6
Probably will not	22.1	21.3	22.4	23.0
Probably will	14.3	20.4	20.7	21.0
Definitely will	4.8	5.1	6.4	6.5
	N = (3063)	(3212)	(3572)	(3659)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.6	0.8	1.3	1.7
Seventh or Eighth grade	5.9	7.7	10.3	12.0
Ninth grade	10.7	14.2	15.1	14.5
Tenth grade	13.4	14.1	12.3	14.5
Eleventh grade	11.7	10.3	11.2	10.8
Twelfth grade	4.9	5.7	6.1	5.6
Never used	52.7	47.2	43.6	40.8
	N ^a = (3082)	(2970)	(6109)	(6144)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 2-8

Marihuana: Grade in Which First Used by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	<u>Number of Cases</u>	<u>Grade in school</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	6000	1.7	12.0	14.5	14.5	10.8	5.6	40.8
Sex:								
Male	2800	2.8	14.0	14.9	15.6	11.0	6.0	35.6
Female	3100	0.6	10.1	13.9	13.3	10.6	5.3	46.1
College Plans:								
None or under 4 yrs	2500	2.3	12.2	15.8	14.6	10.8	5.6	38.6
Complete 4 yrs	3100	0.9	11.0	12.7	14.0	11.1	5.8	44.5
Region:								
Northeast	1400	1.9	15.0	18.0	16.5	9.6	5.7	33.3
North Central	2000	1.6	11.6	14.5	15.0	12.3	5.5	39.4
South	1600	1.0	9.9	12.6	13.1	10.2	5.6	47.6
West	1000	3.4	12.9	13.6	13.0	10.8	5.2	41.0
Population Density:								
Large SMSA	1800	2.0	14.4	16.8	16.4	11.5	5.1	33.8
Other SMSA	2800	1.7	14.2	14.6	13.6	10.3	5.6	39.8
Non-SMSA	1400	1.4	7.1	12.7	14.1	10.8	5.8	48.1

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 1978)	Percent reporting first use prior to tenth grade ^a				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	6000	17.2	22.7	26.7	28.2	+1.5
Sex:						
Male	2800	19.4	26.8	31.1	31.7	+0.6
Female	3100	14.6	18.5	22.2	24.6	+2.4
College Plans:						
None or under 4 yrs	2500	NA	25.3	29.6	30.3	+0.7
Complete 4 yrs	3100	NA	19.1	22.4	24.6	+2.2
Region:						
Northeast	1400	22.9	27.6	31.7	34.9	+3.2
North Central	2000	15.4	21.0	24.7	27.7	+3.0
South	1600	11.5	17.4	23.5	23.5	0.0
West	1000	24.4	29.4	29.8	29.9	+0.1
Population Density:						
Large SMSA	1800	22.2	27.3	33.2	33.2	0.0
Other SMSA	2800	17.7	23.1	27.6	30.5	+2.9
Non-SMSA	1400	13.2	18.9	20.7	21.2	+0.5

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 2-10

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

	Number of Cases (Class of 1978)	<u>Percent who used daily in last thirty days^a</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	17800	6.0	8.2	9.1	10.7	+1.6 <i>ss</i>
Sex:						
Male	8200	8.1	10.8	12.4	14.2	+1.8 <i>s</i>
Female	9000	4.0	5.0	5.6	7.1	+1.5 <i>ss</i>
College Plans:						
None or under 4 yrs	7500	NA	9.9	11.1	12.8	+1.7 <i>s</i>
Complete 4 yrs	8900	NA	5.5	6.3	7.4	+1.1 <i>s</i>
Region:						
Northeast	4600	6.7	10.2	9.9	14.5	+4.6 <i>sss</i>
North Central	5400	6.2	8.1	8.8	11.4	+2.6 <i>ss</i>
South	5000	5.0	6.7	9.1	8.5	-0.6
West	2800	6.5	8.0	8.1	8.2	+0.1
Population Density:						
Large SMSA	5500	8.4	10.7	9.5	12.7	+3.2 <i>sss</i>
Other SMSA	8100	5.9	8.2	10.0	10.9	+0.9
Non-SMSA	4200	4.5	6.3	7.6	9.0	+1.4

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aDaily use is defined as use on 20 or more occasions in the past thirty days.

TABLE 2-11

Marihuana: Trends in Degree and Duration of Feeling High

Q. <i>When you take marihuana or hashish how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
Not at all high	6.9	5.7	7.5	6.3
A little high	22.1	20.9	22.5	20.3
Moderately high	45.5	47.7	43.5	46.8
Very high	25.5	25.7	26.5	26.6
	N = (1142)	(1394)	(1685)	(1873)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	50.0	55.5	52.4	49.8
Not at all high	2.8	2.5	3.6	3.2
A little high	8.8	9.3	10.7	10.2
Moderately high	18.2	21.2	20.7	23.5
Very high	10.2	11.4	12.6	13.4
	N = (2855)	(3133)	(3540)	(3731)
Q. <i>When you take marihuana or hashish how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	8.5	8.0	9.5	8.0
One to two hours	39.7	43.2	42.6	47.4
Three to six hours	45.4	43.7	42.7	39.0
Seven to 24 hours	5.9	4.9	4.7	5.1
More than 24 hours	0.5	0.2	0.6	0.5
	N = (1141)	(1389)	(1687)	(1873)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	60.0	55.5	52.4	49.8
Usually don't get high	3.4	3.6	4.5	4.0
One to two hours	15.9	19.2	20.3	23.8
Three to six hours	18.2	19.4	20.3	19.6
Seven to 24 hours	2.4	2.2	2.2	2.6
More than 24 hours	0.2	0.1	0.3	0.3
	N = (2853)	(3121)	(3544)	(3731)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 2-12

Marihuana: Degree of Feeling High, Class of 1978

Q. <i>When you take marihuana or hashish how high do you usually get?</i>	Number of Cases	Percent of recent users ^a saying:			
		Not at all	A little	Moderately	Very
All seniors	1873	6.3	20.3	46.8	26.6
Sex:					
Male	926	5.2	19.4	48.7	26.8
Female	819	7.5	23.3	44.1	25.1
College Plans:					
None or under 4 yrs	722	5.6	19.0	49.4	26.0
Complete 4 yrs	828	7.7	23.9	45.7	22.7
Region:					
Northeast	540	4.4	19.1	45.1	31.4
North Central	589	8.3	23.0	45.5	23.2
South	476	6.4	17.7	49.1	26.8
West	268	5.5	22.2	48.2	24.1
Population Density:					
Large SMSA	622	6.4	22.1	44.9	26.7
Other SMSA	863	6.7	20.5	45.4	27.4
Non-SMSA	388	5.4	18.0	51.2	25.4

NOTE: See Appendix D for definition of variables.

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 2-13
Marihuana: Degree of Feeling High, Class of 1978

Q. <i>When you take marihuana or hashish how high do you usually get?</i>	Number of Cases	Percent of all respondents ^a saying:				
		Did not use in last 12 months	Not at all	A little	Moderately	Very
All seniors	3731	49.8	3.2	10.2	23.5	13.4
Sex:						
Male	1657	44.1	2.9	10.8	27.2	15.0
Female	1849	55.7	3.3	10.3	19.5	11.1
College Plans:						
None or under 4 yrs	1399	48.4	2.9	9.8	25.5	13.4
Complete 4 yrs	1758	52.9	3.6	11.3	21.5	10.7
Region:						
Northeast	912	40.8	2.6	11.3	26.7	18.6
North Central	1141	48.4	4.3	11.9	23.5	12.0
South	1115	57.3	2.7	7.6	21.0	11.4
West	546	50.9	2.7	10.9	23.7	11.8
Population Density:						
Large SMSA	1087	42.8	3.7	12.6	25.7	15.3
Other SMSA	1699	49.2	3.4	10.4	23.1	13.9
Non-SMSA	896	56.7	2.3	7.8	22.2	11.0

NOTE: See Appendix D for definition of variables.

^aFigures are based on all respondents, whether or not they use the drug.

TABLE 2-14

Marihuana: Duration of Feeling High, Class of 1978

Q. <i>When you take marihuana or hashish how long do you usually stay high?</i>	Number of Cases	Percent of recent users ^a saying:				
		Usually don't get high	1-2 hours	3-6 hours	7-24 hours	More than 24 hours
All seniors	1873	8.0	47.4	39.0	5.1	0.5
Sex:						
Male	924	6.4	47.5	40.4	4.8	0.7
Female	824	9.6	47.0	37.6	5.6	0.1
College Plans:						
None or under 4 yrs	726	7.0	45.8	41.9	4.9	0.4
Complete 4 yrs	832	9.3	48.9	36.2	5.3	0.2
Region:						
Northeast	541	5.7	50.1	37.7	5.9	0.6
North Central	589	10.7	48.3	34.7	5.7	0.6
South	472	8.0	43.2	43.5	5.1	0.1
West	271	6.5	48.5	42.1	1.9	1.0
Population Density:						
Large SMSA	624	7.8	49.5	38.4	4.0	0.4
Other SMSA	862	8.6	46.1	40.6	4.1	0.6
Non-SMSA	387	7.1	47.3	36.9	8.0	0.6

NOTE: See Appendix D for definition of variables.

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 2-15
Marihuana: Duration of Feeling High, Class of 1978

Q. <i>When you take marihuana or hashish how long do you usually stay high?</i>	Number of Cases	Percent of all respondents ^a saying:					
		Did not use in last 12 months	Usually don't get high	1-2 hours	3-6 hours	7-24 hours	More than 24 hours
All seniors	3731	49.8	4.0	23.8	19.6	2.6	0.3
Sex:							
Male	1653	44.1	3.6	26.6	22.6	2.7	0.4
Female	1860	55.7	4.3	20.8	16.7	2.5	0.0
College Plans:							
None or under 4 yrs	1407	48.4	3.6	23.6	21.6	2.5	0.2
Complete 4 yrs	1766	52.9	4.4	23.0	17.1	2.5	0.1
Region:							
Northeast	914	40.8	3.4	29.7	22.3	3.5	0.4
North Central	1141	48.4	5.5	24.9	17.9	2.9	0.3
South	1105	57.3	3.4	18.4	18.6	2.2	0.0
West	552	50.9	3.2	23.8	20.7	0.9	0.5
Population Density:							
Large SMSA	1091	42.8	4.5	28.3	22.0	2.3	0.2
Other SMSA	1697	49.2	4.4	23.4	20.6	2.1	0.3
Non-SMSA	894	56.7	3.1	20.5	16.0	3.5	0.3

NOTE: See Appendix D for definition of variables.

^a Figures are based on all respondents, whether or not they use the drug.

FIGURE 2-1

Marihuana: Reconstructed Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.

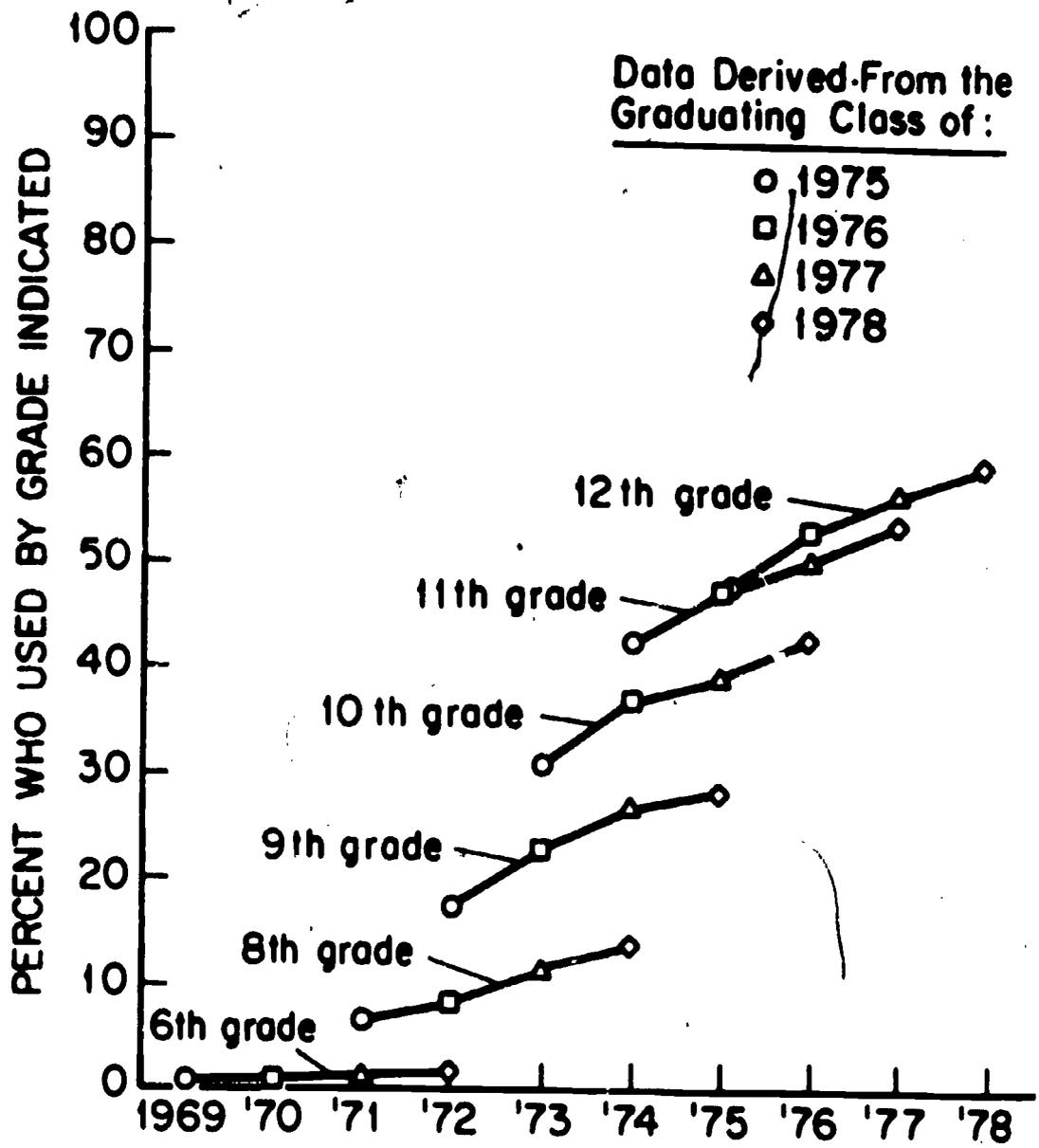
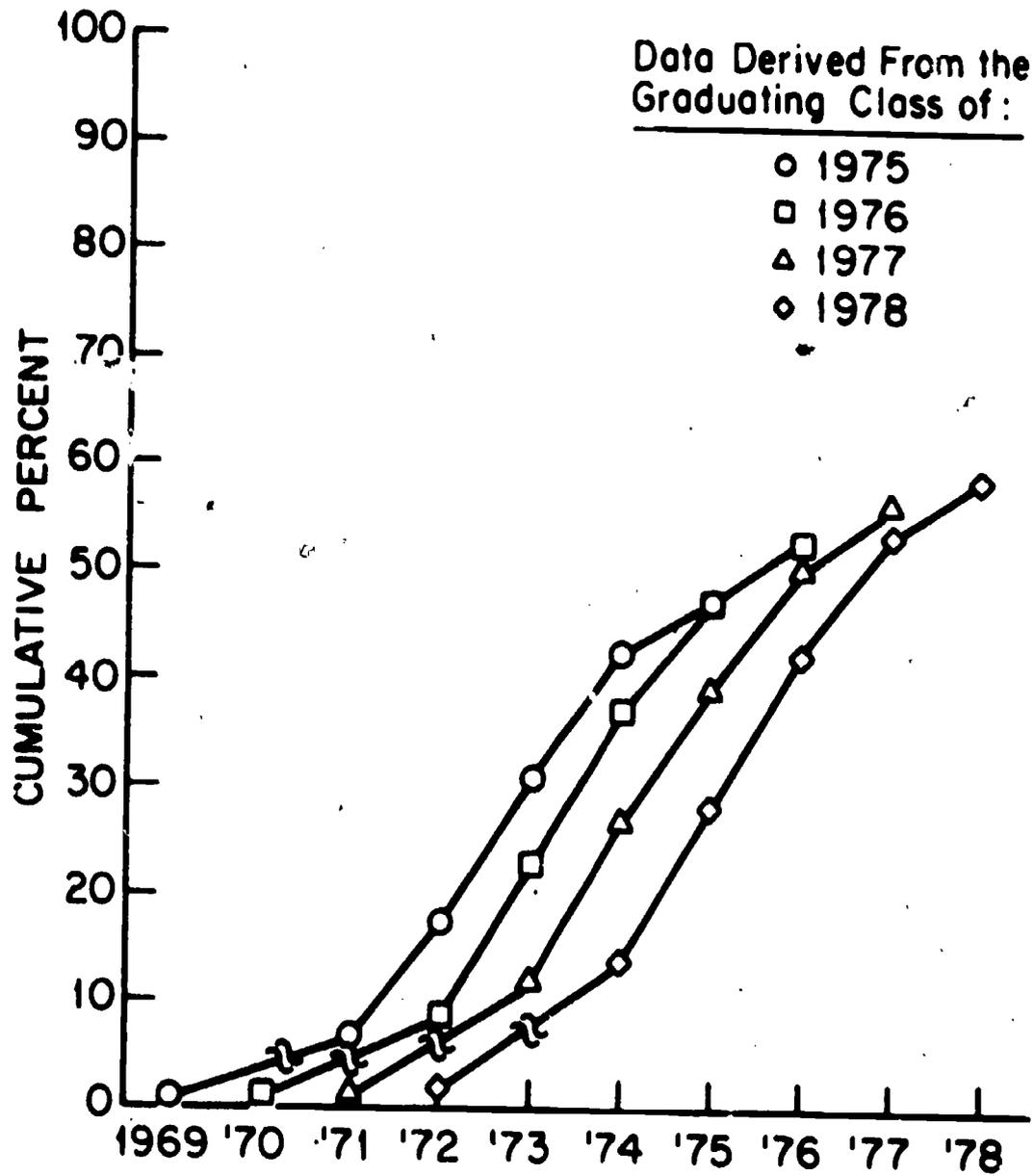


FIGURE 2-2

Marihuana: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

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. Two classes of inhalants which are receiving increasing attention of late are amyl nitrite ("poppers," "snappers") and butyl nitrite (Locker Room, Rush, etc.).

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 two-year interval.* Data specific to the use of amyl and butyl nitrites will not be available until next year.

Prevalence of Use in 1978

<u>Total Sample</u>	<u>Table(s)</u>
● One of every eight seniors (or about 12%) has used an inhalant at some time.	2
● However, only 5% have used inhalants more than once or twice, indicating that most previous users were only experimenting.	6
● Only 4% have used in the prior year, the majority of whom used it only once or twice, and only 1.5% report use in the prior month.	3,4,6
● Very few report use on 20 or more occasions in their lifetime (1%), and practically no one reports daily use during the previous 30-day interval (0.1%).	6

*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, thus the numbers of cases on which most tables in this chapter are based are closer to 14,000 than to 18,000. Also, questions concerning grade of first use were not added until 1978, so trend data on this subject are not yet available.

Subgroup DifferencesTable(s)

- Sex Differences. Prevalence is substantially higher among males than females for all three time intervals (lifetime, annual, and 30-day). For example, 5.6% of the males report use in the last year vs. 2.8% of the females—a ratio of two to one. 2,3,4
- College Plans. 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 5.0% and 3.4%, respectively. Somewhat more of the heavier users are in the former group than the latter. 2,3,4
- Region of the Country. There are relatively small regional differences in inhalant use although there appears to be some concentration of heavier use in the Northeast and North Central regions. 2,3,4
- Population Density. 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 PrevalenceTotal Sample

- Trend data exist only across a two-year period, from 1976 to 1978. The class of 1978 reports a prevalence rate for all three time intervals which is only slightly higher than the rate observed in the class of 1976, although each year has shown a consistent rise over the previous year. The annual prevalence figures are 3.0% for the class of 1976, 3.7% for the class of 1977, and 4.1% for the class of 1978. 2,3,4
- The proportion using 10 or more times during the year is very small and hardly increasing (0.6% in 1978 vs. 0.4% in 1976 and 1977). 6

Subgroup Differences in Trends

- There is rather little change among subgroups, which is not surprising given little change has been observed for the entire sample. 2,3,4
- A slightly greater-than-average increase is observed over the two years among males, the noncollege-bound, those from the North Central region and those from the least urban areas (non-SMSA's). 2,3,4

Use at Earlier Grade LevelsTable(s)

- Among those who have tried inhalants, initial use tended to occur early—mostly in 7th through 9th grade. 7
- Males and the noncollege-bound are disproportionately likely to have used very early (i.e., below 7th grade). 8
- No data are yet available to trace trends in age of onset. 7

TABLE 3-1

Inhalants: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (Entries are percentages)

	<u>Number of Cases^a</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	14300	12.0	1.5	2.6	7.9	88.0
Sex:						
Male	6600	14.7	2.1	3.5	9.1	85.3
Female	7200	9.3	0.9	1.9	6.5	90.7
College Plans:						
None or under 4 yrs	6000	14.8	2.0	2.9	9.9	85.2
Complete 4 yrs	7100	9.1	1.0	2.4	5.7	90.9
Region:						
Northeast	3700	12.4	1.6	2.8	8.0	87.6
North Central	4300	12.7	1.6	3.2	7.9	87.3
South	4000	11.4	1.4	2.2	7.8	88.6
West	2300	11.1	1.2	2.4	7.5	88.9
Population Density:						
Large SMSA	4400	10.9	1.5	1.9	7.5	89.1
Other SMSA	6500	11.9	1.2	2.5	8.2	88.1
Non-SMSA	3400	13.0	1.9	3.4	7.7	87.0

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

^aThere 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 1978) ^a	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	14300	NA	10.3	11.1	12.0	+0.9	
Sex:							
Male	6600	NA	12.6	14.1	14.7	+0.6	
Female	7200	NA	7.9	8.2	9.3	+1.1	
College Plans:							
None or under 4 yrs	6000	NA	12.4	13.5	14.8	+1.3	
Complete 4 yrs	7100	NA	8.0	8.6	9.1	+0.5	
Region:							
Northeast	3700	NA	10.9	12.0	12.4	+0.4	
North Central	4300	NA	8.8	11.6	12.6	+1.0	
South	4000	NA	11.3	10.6	11.4	+0.8	
West	2300	NA	10.1	9.5	11.1	+1.6	
Population Density:							
Large SMSA	4400	NA	9.9	10.2	10.9	+0.7	
Other SMSA	6500	NA	10.0	11.1	11.9	+0.8	
Non-SMSA	3400	NA	10.9	11.7	13.0	+1.3	

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^a 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 1978) ^a	<u>Percent who used in last twelve months</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 <i>change</i>
ATI seniors	14300	NA	3.0	3.7	4.1	+0.4
Sex:						
Male	6600	NA	3.8	5.1	5.6	+0.5
Female	7200	NA	2.0	2.4	2.8	+0.4
College Plans:						
None or under 4 yrs	6000	NA	3.6	4.7	5.0	+0.3
Complete 4 yrs	7100	NA	2.2	2.9	3.4	+0.5
Region:						
Northeast	3700	NA	3.2	4.1	4.4	+0.3
North Central	4300	NA	2.6	4.2	4.8	+0.6
South	4000	NA	3.8	3.3	3.6	+0.3
West	2300	NA	1.7	3.0	3.6	+0.6
Population Density:						
Large SMSA	4400	NA	2.9	3.4	3.4	0.0
Other SMSA	6500	NA	2.6	3.6	3.7	+0.1
Non-SMSA	3400	NA	3.4	4.2	5.3	+1.1

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^a 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 1978) ^a	<u>Percent who used in last thirty days</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	14300	NA	0.9	1.3	1.5	+0.2
Sex:						
Male	6600	NA	1.3	1.9	2.1	+0.2
Female	7200	NA	0.5	0.7	0.9	+0.2
College Plans:						
None or under 4 yrs	6000	NA	1.1	1.8	2.0	+0.2
Complete 4 yrs	7100	NA	0.7	0.9	1.0	+0.1
Region:						
Northeast	3700	NA	1.2	1.3	1.6	+0.3
North Central	4300	NA	0.8	1.4	1.6	+0.2
South	4000	NA	0.9	1.1	1.4	+0.3
West	2300	NA	0.7	1.5	1.2	-0.3
Population Density:						
Large SMSA	4400	NA	1.0	1.1	1.5	+0.4
Other SMSA	6500	NA	0.8	1.3	1.2	-0.1
Non-SMSA	3400	NA	0.9	1.6	1.9	+0.3

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^a 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 1978
(Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	14300	95.9	2.3	0.8	0.4	0.3	0.1	0.2
Sex:								
Male	6600	94.4	3.1	1.1	0.5	0.3	0.2	0.4
Female	7200	97.2	1.6	0.4	0.4	0.2	0.1	0.1
College Plans:								
None or under 4 yrs	6000	95.1	2.7	0.9	0.5	0.3	0.1	0.3
Complete 4 yrs	7100	96.6	1.9	0.7	0.3	0.2	0.1	0.2
Region:								
Northeast	3700	95.6	2.2	0.9	0.5	0.4	0.1	0.3
North Central	4300	95.2	2.7	0.9	0.6	0.2	0.1	0.4
South	4000	96.4	2.1	0.7	0.4	0.1	0.1	0.1
West	2300	96.4	2.2	0.5	0.2	0.4	0.1	0.1
Population Density:								
Large SMSA	4400	96.6	1.6	0.7	0.5	0.4	0.1	0.2
Other SMSA	6500	96.3	2.4	0.7	0.3	0.2	0.1	0.1
Non-SMSA	3400	94.7	2.8	1.0	0.6	0.2	0.2	0.5

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

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>Class of 1978</u>
<u>Lifetime use</u>				
No occasions	NA	89.7	88.9	88.0
1-2 occasions	NA	6.4	6.6	7.0
3-5 occasions	NA	1.7	1.8	2.0
6-9 occasions	NA	0.8	1.1	1.1
10-19 occasions	NA	0.7	0.7	0.8
20-39 occasions	NA	0.3	0.4	0.4
40 or more	NA	0.4	0.4	0.6
	N = (NA)	(12827)	(14186)	(14648)
<u>Use in last twelve months</u>				
No occasions	NA	97.0	96.3	95.9
1-2 occasions	NA	1.8	2.3	2.3
3-5 occasions	NA	0.6	0.7	0.8
6-9 occasions	NA	0.2	0.3	0.4
10-19 occasions	NA	0.2	0.2	0.3
20-39 occasions	NA	0.1	0.1	0.1
40 or more	NA	0.1	0.1	0.2
	N = (NA)	(12809)	(14160)	(14623)
<u>Use in last thirty days</u>				
No occasions	NA	99.1	98.7	98.5
1-2 occasions	NA	0.6	0.9	0.9
3-5 occasions	NA	0.1	0.2	0.3
6-9 occasions	NA	0.0	0.1	0.1
10-19 occasions	NA	0.0	0.0	0.1
20-39 occasions	NA	0.0	0.0	0.0
40 or more	NA	0.0	0.0	0.1
	N = (NA)	(12800)	(14159)	(14617)
<u>Probability of future use</u>				
Definitely will not	NA	NA	NA	NA
Probably will not	NA	NA	NA	NA
Probably will	NA	NA	NA	NA
Definitely will	NA	NA	NA	NA
	N = (NA)	(NA)	(NA)	(NA)

NOTE: NA indicates question not asked.

TABLE 3-7
Inhalants: 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>	<u>Class of 1978</u>
Sixth grade (or below)	NA	NA	NA	1.7
Seventh or Eighth grade	NA	NA	NA	3.0
Ninth grade	NA	NA	NA	2.9
Tenth grade	NA	NA	NA	1.7
Eleventh grade	NA	NA	NA	1.7
Twelfth grade	NA	NA	NA	1.1
Never used	NA	NA	NA	88.0
	N ^a = (NA)	(NA)	(NA)	(2801)

^aThis question was asked in one form only in 1978.

NOTE: NA indicates data not available.

TABLE 3-8

Inhalants: Grade in Which First Used by Subgroups, Class of 1978
(Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
All seniors	3000	1.7	3.0	2.9	1.7	1.7	1.1	88.0
Sex:								
Male	1400	3.1	3.6	2.8	1.9	1.9	1.4	85.3
Female	1600	0.7	2.4	2.7	1.5	1.5	0.6	90.7
College Plans:								
None or under 4 yrs	1300	2.5	3.5	3.8	2.2	2.1	0.6	85.2
Complete 4 yrs	1600	1.2	2.6	1.9	0.9	1.3	1.2	90.9
Region:								
Northeast	700	1.5	1.8	3.5	1.9	2.0	1.7	87.6
North Central	1000	2.4	3.7	2.4	2.1	1.3	0.7	87.3
South	800	1.0	3.6	2.6	1.4	2.2	0.6	88.6
West	500	2.0	2.5	3.3	1.0	1.0	1.3	88.9
Population Density:								
Large SMSA	900	1.1	2.6	2.6	1.5	1.6	1.6	89.1
Other SMSA	1400	2.0	2.9	2.6	2.2	1.2	0.9	88.1
Non-SMSA	700	1.8	3.5	3.3	1.3	2.5	0.5	87.0

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

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 1978

Total Sample

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 twelve months about 10% had used one or more hallucinogens. 2,3
- Reported prevalence for the previous month is 3.9%; and daily use is virtually nonexistent. 4,6
- Only 2.1% report using hallucinogens on 20 or more occasions in their lifetime. 6

Subgroup Differences

- Sex Differences. Recent use tends to be about twice as high among males as among females. For example, the annual prevalence figures are 12% and 7% respectively, while the comparable 30-day prevalence figures are 4.8% and 2.7%. The ratio for lifetime prevalence is considerably smaller (17% vs. 12%) suggesting that female users are more likely to stop 2,3,4,5

using by twelfth grade than are male users. About twice as many males (.7%) as females (.4%) 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 11% vs. 7% for the college-bound. Frequent use is also disproportionately high among the noncollege-bound with .7% of them reporting use on 20 plus occasions in the previous year vs. .4% 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 13% and 11% prevalence in the last year) while the South shows the lowest (e.g., 6% 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 four years. In 1978 the annual prevalence rates were 8%, 9%, and 12% for Non-SMSAs, Other SMSAs, and Large SMSAs, respectively. 2,3,4

Recent Trends in Prevalence

Total Sample

- The pattern of change between 1975 and 1978 is somewhat uneven, as noted below.
- Between 1975 and 1977, there was 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. In 1978, however, this decline did not continue. Annual prevalence, for instance, rose to 9.6%. (The 1977-78 change is not significant.) 2,3
- The proportion of students reporting frequent use also declined steadily from 1975 to 1977, but rose slightly (but non-significantly) in 1978. Reported use on 20 or more occasions during the previous year was 1.0% in 1975, .7% in 1976, .5% in 1977, and .6% in 1978. 6

Subgroup Differences in Trends

- Between 1975 and 1978, changes in the prevalence of use among the various subgroups were generally all in the same direction and the same magnitude as the changes described for the total sample. 2,3,4

Table(s)

- In 1978, however, two subgroup differences stand out. First, the slight overall increase in hallucinogen use mainly reflects increased use by seniors in large cities and the Northeast. Second, the overall slight increase is not true of Southern seniors, whose use continues to decline. Annual prevalence for Southern seniors was 6.3% in 1978, down from 8.5% in 1975 and 6.8% in 1977.

2,3,4

Use at Earlier Grade Levels

- Most of the class of 1978 who tried hallucinogens first did so in ninth, tenth, or eleventh grade (3-4% in each grade). This has been true for all four class cohorts, as Figure 2 illustrates.
- However, Figures 1 and 2 also illustrate that some important changes have been taking place across cohorts. During the period from 1970 to 1974, each of the cohorts studied here showed a very slight increase from the previous cohorts in lifetime prevalence by a given grade level (say 8th, 9th, or 10th grade). However, from 1975 to 1978, when these four cohorts were in the upper grade levels, each started showing a lower lifetime prevalence than the preceding cohorts at the same grade level.
- Overall, then, there is evidence suggestive of an upward secular trend or period effect in hallucinogen use in the early 70's (that is, one which is observed among various age groups) and suggestive of a downward secular trend in the middle 70's. Another year or two of data will be needed to determine whether this downward trend will continue, since there appears to be some evidence of a pause in it at the present.
- As was true last year, subgroup differences in lifetime prevalence by twelfth grade are reflected in the initiation rates at earlier grade levels. 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, discussed earlier, in lifetime prevalence at twelfth grade.

7
Fig 2

Fig 1,2

Fig 2

8

Probability of Future Use

- The questions on the probability of future use asked about LSD specifically. Fewer than 3% of 1978 seniors expect to be using LSD five years in the future.
- The vast majority (87%) say they "definitely will not" use LSD in the future, and about 11% say they "probably will not."

6

6

- These figures for 1978 represent virtually no change from earlier years. 6

Degree and Duration of Highs

- Users of LSD and users of all other hallucinogens (taken as a class) were asked separate sets of questions, which are reported in Tables 4-10 and 4-11 respectively. Seniors who reported any use of LSD in the prior 12 months were asked to state how high they usually got and how long they usually stayed high. Seniors who reported use of any of the other hallucinogens were asked similar questions.
- The great majority of LSD users (70%) report that they usually get "very high" on the drug, although the proportion has been dropping since 1975 when it was 79%. 10
- Most LSD users (64%) also report that their highs usually last 7 hours or more. This proportion has also been dropping since 1975, when it was 74%. 10
- Most users of other hallucinogens (54%) report that they usually get "very high" on these drugs. This is a smaller proportion than for LSD, and unlike LSD there has been no consistent downward trend over the last four years in degree of the highs experienced. 11
- The other psychedelics are somewhat shorter acting than LSD, with most users (57%) usually remaining high six hours or less. Still, a substantial proportion (43%) remain high for 7 to 24 hours. 11
- There is no consistent trend in the duration of highs among users of other hallucinogens when respondents from the last four graduating classes are compared. 11

TABLE 4-1

Hallucinogens: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	14.3	3.9	5.7	4.7	85.7
Sex:						
Male	8200	16.5	4.8	6.8	4.9	83.5
Female	9000	11.7	2.7	4.6	4.4	88.3
College Plans:						
None or under 4 yrs	7500	16.4	4.4	6.6	5.4	83.6
Complete 4 yrs	8900	11.0	2.8	4.5	3.7	89.0
Region:						
Northeast	4600	17.8	5.4	7.6	4.8	82.2
North Central	5400	15.9	4.7	6.0	5.2	84.1
South	5000	9.8	2.4	3.9	3.5	90.2
West	2800	15.4	3.0	6.6	5.8	84.6
Population Density:						
Large SMSA	5500	17.2	5.1	6.8	5.3	82.8
Other SMSA	8100	14.5	3.6	5.7	5.2	85.5
Non-SMSA	4200	11.5	3.1	5.2	3.2	88.5

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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	16.3	15.1	13.9	14.3	+0.4	
Sex:							
Male	8200	18.1	17.2	15.8	16.5	+0.7	
Female	9000	14.6	12.6	11.7	11.7	0.0	
College Plans:							
None or under 4 yrs	7500	NA	17.8	16.4	16.4	0.0	
Complete 4 yrs	8900	NA	11.5	10.5	11.0	+0.5	
Region:							
Northeast	4600	19.1	16.8	15.3	17.8	+2.5	
North Central	5400	17.8	16.3	15.3	15.9	+0.6	
South	5000	12.6	12.5	11.5	9.8	-1.7	
West	2800	16.6	15.5	13.4	15.4	+2.0	
Population Density:							
Large SMSA	5500	20.1	17.9	15.4	17.2	+1.8	
Other SMSA	8100	18.1	15.3	14.8	14.5	-0.3	
Non-SMSA	4200	11.8	12.9	11.4	11.5	+0.1	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	11.2	9.4	8.8	9.6	+0.8	
Sex:							
Male	8200	13.7	11.6	10.8	11.6	+0.8	
Female	9000	9.0	6.9	6.5	7.3	+0.8	
College Plans:							
None or under 4 yrs	7500	NA	11.2	10.6	11.0	+0.4	
Complete 4 yrs	8900	NA	6.9	6.4	7.3	+0.9	
Region:							
Northeast	4600	13.2	10.9	10.6	13.0	+2.4 s	
North Central	5400	13.0	10.3	9.7	10.7	+1.0	
South	5000	8.5	7.4	6.8	6.3	-0.5	
West	2800	10.2	9.3	8.2	9.6	+1.4	
Population Density:							
Large SMSA	5500	13.9	11.1	9.9	11.9	+2.0 s	
Other SMSA	8100	12.1	9.8	9.1	9.3	+0.2	
Non-SMSA	4200	8.5	7.7	7.5	8.3	+0.8	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	17800	4.7	3.4	4.1	3.9	-0.2
Sex:						
Male	8200	6.0	4.5	5.5	4.8	-0.7
Female	9000	3.6	2.2	2.5	2.7	+0.2
College Plans:						
None or under 4 yrs	7500	NA	4.2	4.9	4.4	-0.5
Complete 4 yrs	8900	NA	2.3	2.6	2.8	+0.2
Region:						
Northeast	4600	5.5	4.3	4.8	5.4	+0.6
North Central	5400	5.7	4.1	4.8	4.7	-0.1
South	5000	3.6	2.7	3.1	2.4	-0.7
West	2800	4.0	2.3	3.2	3.0	-0.2
Population Density:						
Large SMSA	5500	5.8	4.6	4.6	5.1	+0.5
Other SMSA	8100	4.9	3.8	4.1	3.6	-0.5
Non-SMSA	4200	3.8	2.1	3.5	3.1	-0.4

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	90.4	4.0	2.9	0.9	1.1	0.3	0.3
Sex:								
Male	8200	88.4	4.7	3.7	1.1	1.4	0.3	0.4
Female	9000	92.7	3.3	2.2	0.7	0.8	0.2	0.2
College Plans:								
None or under 4 yrs	7500	89.0	4.6	3.4	1.1	1.2	0.3	0.4
Complete 4 yrs	8900	92.7	3.2	2.3	0.6	0.8	0.2	0.2
Region:								
Northeast	4600	87.0	5.3	3.8	1.3	1.7	0.5	0.4
North Central	5400	89.3	4.1	3.4	1.0	1.3	0.4	0.5
South	5000	93.7	2.8	1.8	0.7	0.7	0.1	0.2
West	2800	90.4	4.5	3.1	0.9	0.6	0.2	0.3
Population Density:								
Large SMSA	5500	88.1	4.9	3.7	1.1	1.5	0.3	0.4
Other SMSA	8100	90.7	4.0	2.8	1.1	0.9	0.3	0.3
Non-SMSA	4200	91.7	3.3	2.6	0.7	1.1	0.3	0.3

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)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	83.7	84.9	86.1	85.7
1-2 occasions	4.5	4.9	4.2	4.8
3-5 occasions	4.0	4.1	3.7	3.6
6-9 occasions	1.7	1.4	1.4	1.5
10-19 occasions	2.7	2.3	2.3	2.3
20-39 occasions	1.0	0.8	0.8	0.8
40 or more	2.3	1.6	1.4	1.3
	N = (9942)	(16094)	(17880)	(18391)
<u>Use in last twelve months</u>				
No occasions	88.8	90.6	91.2	90.4
1-2 occasions	3.7	4.0	3.4	4.0
3-5 occasions	3.6	2.7	2.6	2.9
6-9 occasions	1.2	1.0	1.1	0.9
10-19 occasions	1.7	1.0	1.1	1.1
20-39 occasions	0.6	0.4	0.3	0.3
40 or more	0.4	0.3	0.2	0.3
	N = (9940)	(16085)	(17874)	(18385)
<u>Use in last thirty days</u>				
No occasions	95.3	96.6	95.9	95.1
1-2 occasions	2.7	1.9	2.2	2.2
3-5 occasions	1.2	1.0	1.2	1.0
6-9 occasions	0.5	0.3	0.4	0.3
10-19 occasions	0.2	0.1	0.2	0.3
20-39 occasions	0.0	0.1	0.0	0.0
40 or more	0.1	0.0	0.0	0.0
	N = (9937)	(16085)	(17877)	(18379)
<u>Probability of future use^a</u>				
Definitely will not	85.8	86.5	85.8	86.8
Probably will not	11.3	10.9	11.7	10.6
Probably will	2.0	2.0	1.8	1.7
Definitely will	0.8	0.6	0.7	0.9
	N = (2956)	(3053)	(3446)	(3482)

^aThis 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>	<u>Class of 1978</u>
Sixth grade (or below)	0.1	0.1	0.1	0.3
Seventh or Eighth grade	0.9	1.3	1.4	1.7
Ninth grade	3.1	3.6	3.7	3.3
Tenth grade	4.5	5.1	4.0	3.7
Eleventh grade	4.5	3.7	3.2	3.3
Twelfth grade	3.1	1.4	1.5	1.9
Never used	83.7	84.9	86.1	85.7
	N ^a = (2979)	(2934)	(6082)	(6077)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 4-8

Hallucinogens: Grade in Which First Used by Subgroups, Class of 1978
(Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
All seniors	6000	0.3	1.7	3.3	3.7	3.3	1.9	85.7
Sex:								
Male	2800	0.4	1.9	3.8	4.8	3.5	2.1	83.5
Female	3100	0.1	1.4	2.9	2.7	2.9	1.7	88.3
College Plans:								
None or under 4 yrs	2500	0.4	2.1	4.0	4.6	3.3	2.1	83.6
Complete 4 yrs	3100	0.0	1.4	2.5	2.6	2.8	1.7	89.0
Region:								
Northeast	1400	0.3	1.8	3.7	5.4	4.5	2.1	82.2
North Central	2000	0.3	2.1	4.0	3.9	3.7	1.9	84.1
South	1600	0.1	0.8	1.8	2.5	2.5	2.1	90.2
West	1000	0.6	2.8	4.6	3.6	2.7	1.1	84.6
Population Density:								
Large SMSA	1800	0.3	2.0	3.9	5.0	3.7	2.3	82.8
Other SMSA	2800	0.3	2.2	3.0	3.7	3.4	2.0	85.5
Non-SMSA	1400	0.3	0.8	3.1	2.6	3.0	1.6	88.5

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

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TABLE 4-9

Hallucinogens: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	4.1	5.0	5.2	5.3	+0.1	
Sex:							
Male	2800	5.1	4.7	5.7	6.1	+0.4	
Female	3100	3.3	4.9	4.6	4.4	-0.2	
College Plans:							
None or under 4 yrs	2500	NA	5.5	6.1	6.5	+0.4	
Complete 4 yrs	3100	NA	4.1	4.1	3.9	-0.2	
Region:							
Northeast	1400	4.4	5.6	6.4	5.8	-0.8	
North Central	2000	4.1	5.4	5.4	6.4	+1.0	
South	1600	3.3	3.5	4.5	2.7	-1.8 ^s	
West	1000	5.5	5.8	4.6	8.0	+3.4 ^{ss}	
Population Density:							
Large SMSA	1800	4.4	5.9	6.4	6.2	-0.2	
Other SMSA	2800	5.6	5.3	6.1	5.5	-0.6	
Non-SMSA	1400	2.3	3.7	3.2	4.2	+1.0	

NOTES: Level of significance of difference between the two most recent classes:

^s = .05, ^{ss} = .01, ^{sss} = .001.

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 4-10

LSD: Trends in Degree and Duration of Feeling High

Q. <i>When you take LSD how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
Not at all high	0.2	1.7	1.6	0.5
A little high	4.8	1.9	7.4	4.9
Moderately high	16.2	22.4	19.3	24.7
Very high	78.8	73.9	71.7	69.9
	N = (213)	(213)	(213)	(223)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	92.5	93.6	94.4	93.7
Not at all high	0.0	0.1	0.1	0.0
A little high	0.4	0.1	0.4	0.3
Moderately high	1.2	1.4	1.1	1.6
Very high	5.9	4.7	4.0	4.4
	N = (2840)	(3328)	(3804)	(3540)
Q. <i>When you take LSD how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	1.6	2.3	2.5	0.5
One to two hours	1.3	1.7	3.8	3.9
Three to six hours	22.7	30.7	30.5	31.9
Seven to 24 hours	69.8	59.9	59.8	58.5
More than 24 hours	4.6	5.5	3.4	5.3
	N = (215)	(213)	(212)	(224)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	92.5	93.6	94.4	93.7
Usually don't get high	0.1	0.1	0.1	0.0
One to two hours	0.1	0.1	0.2	0.3
Three to six hours	1.7	2.0	1.7	2.0
Seven to 24 hours	5.2	3.8	3.3	3.7
More than 24 hours	0.3	0.4	0.2	0.3
	N = (2867)	(3328)	(3786)	(3556)

^aFigures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 4-11

Psychedelics: Trends in Degree and Duration of Feeling High

Q. <i>When you take psychedelics other than LSD how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
Not at all high	2.4	1.2	1.2	1.2
A little high	7.9	9.6	8.4	8.3
Moderately high	35.5	39.6	40.8	36.3
Very high	54.1	49.7	49.6	54.3
	N = (322)	(261)	(286)	(326)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	90.4	93.0	93.0	92.7
Not at all high	0.2	0.1	0.1	0.1
A little high	0.8	0.7	0.6	0.6
Moderately high	3.4	2.8	2.9	2.6
Very high	5.2	3.5	3.5	4.0
	N = (3354)	(3729)	(4086)	(4466)
Q. <i>When you take psychedelics other than LSD how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	2.0	1.2	1.1	1.3
One to two hours	8.5	9.4	7.0	8.4
Three to six hours	41.3	46.1	45.5	47.7
Seven to 24 hours	45.6	39.9	44.1	41.1
More than 24 hours	2.7	3.4	2.3	1.5
	N = (322)	(262)	(283)	(326)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	90.4	93.0	93.0	92.7
Usually don't get high	0.2	0.1	0.1	0.1
One to two hours	0.8	0.7	0.5	0.6
Three to six hours	4.0	3.2	3.2	3.5
Seven to 24 hours	4.4	2.8	3.1	3.0
More than 24 hours	0.3	0.2	0.2	0.1
	N = (3354)	(3743)	(4043)	(4466)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 4-1

Hallucinogens: Reconstructed Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.

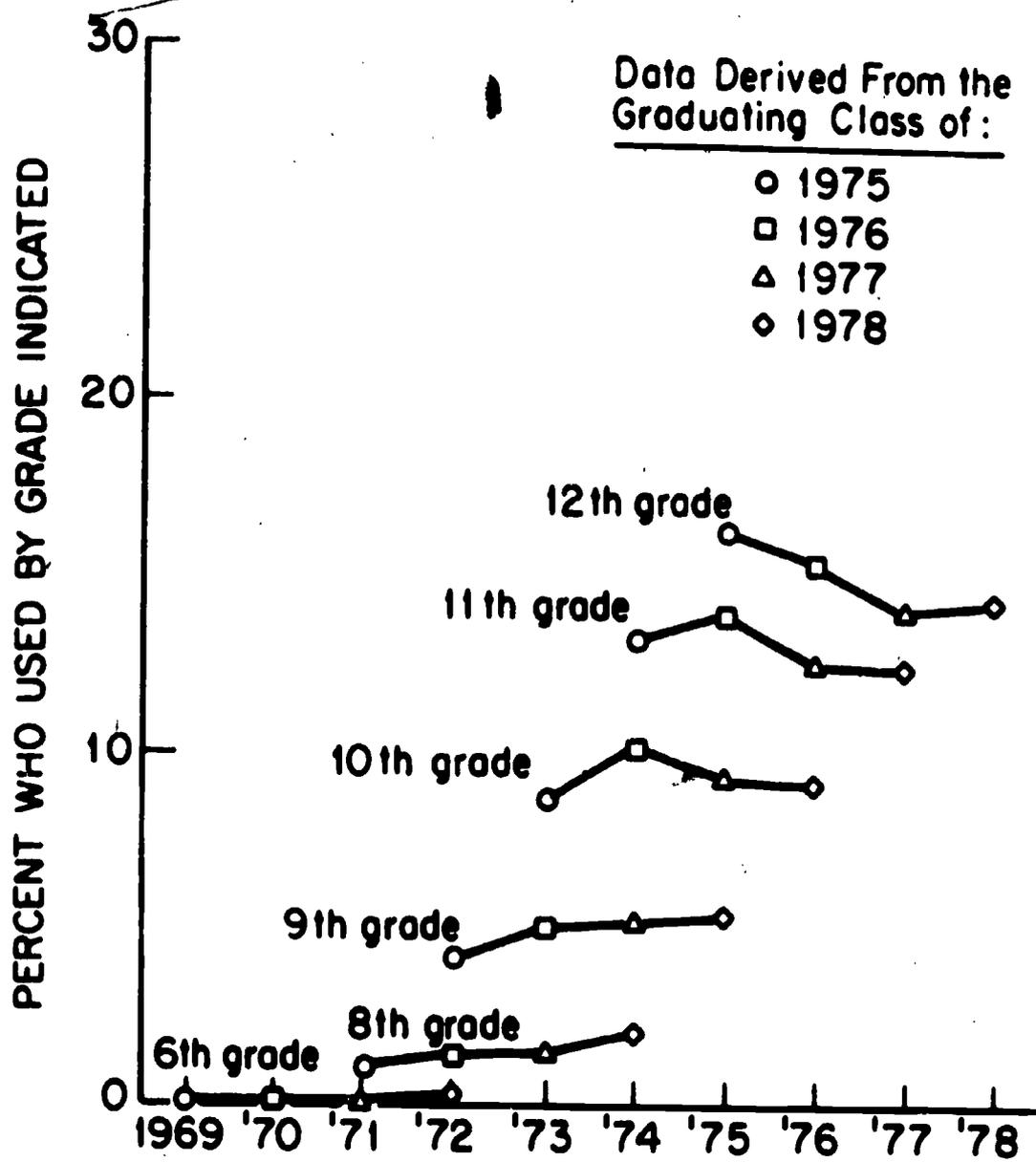
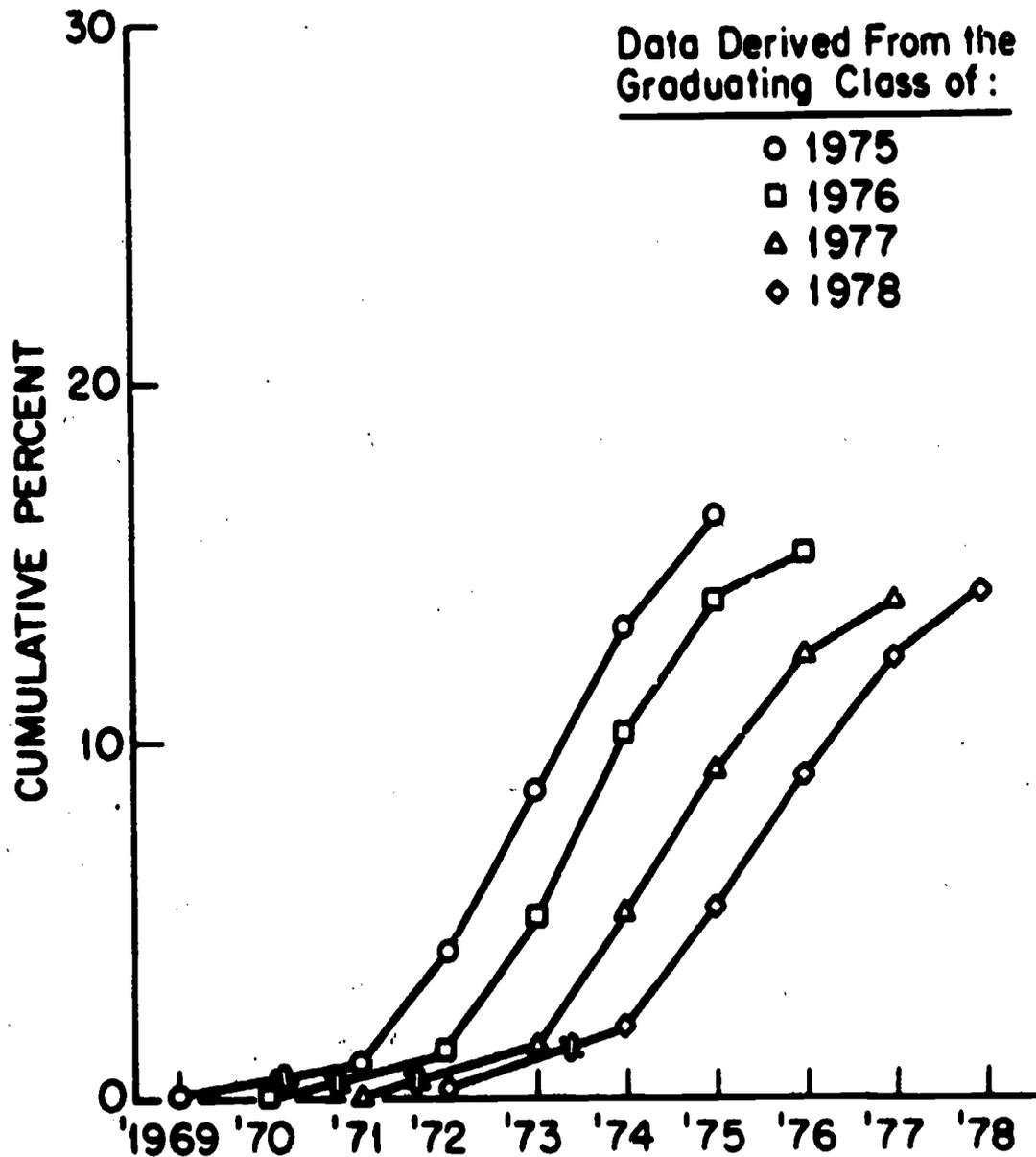


FIGURE 4-2

Hallucinogens: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

Chapter 5

COCAINE

Cocaine is a drug which has received extensive publicity of late and, as is illustrated below, has been growing in popularity among youth as a recreational drug. It is generally very expensive, which may account for the relatively low frequency with which it is used by high school students.

Prevalence of Use in 1978

Total Sample

- | <u>Total Sample</u> | <u>Table(s)</u> |
|--|-----------------|
| ● About one in every eight seniors (13%) 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 9% and 30-day prevalence about 4%. | 3,4 |
| ● The percentage reporting use on 20 or more occasions in their lifetime is 1.3%, and only .2% of high school seniors report using at a daily level in the prior month. In fact, only about 1.6% report use on more than two occasions during the month. | 6 |

Subgroup Differences

- | | |
|--|---------|
| ● <u>Sex Differences.</u> Cocaine use is substantially greater among males than females, with annual prevalence observed at 11.4% and 6.5%, respectively. | 2,3,4,5 |
| ● <u>College Plans.</u> Prevalence rates are higher among noncollege-bound seniors—for example, annual prevalence for 1978 noncollege-bound seniors was 9.5%, compared to 7.7% for college-bound seniors. | 2,3,4,5 |
| ● <u>Region of the Country.</u> There are fair-sized regional differences in cocaine use with the highest prevalence observed for the first time in the Northeast (12% annual rate), followed by the West (11%), the North Central (9%), and the South (7%). | 2,3,4,5 |
| ● <u>Population Density.</u> Cocaine prevalence is highest in the large metropolitan areas (12% annual prevalence) and lowest in the nonmetropolitan areas (6% annual prevalence). | 2,3,4,5 |

Recent Trends in Prevalence

Total Sample

Table(s)

- There now appears to be an accelerating rate of increase in cocaine use. Although cocaine use by seniors has risen modestly each year since 1975, the 1977-78 increase is somewhat larger than earlier yearly increases. Lifetime prevalence rose from 11% in 1977 to 13% in 1978, and the 1977-78 increase is statistically significant for all three time intervals. 2,3,4
- While very few high school seniors report use of cocaine on more than two occasions a year, this proportion has risen from 2.4% in 1975 to 3.9% in 1978 ($p < .001$); and in 1978, for the first time, a measurable proportion (.2%) are reporting daily or near-daily use. 5,6

Subgroup Differences in Trends

- All subgroups in the class of 1978 report higher prevalence rates of cocaine use than the comparable subgroups in the classes of 1975 through 1977, except for non-metropolitan seniors, whose 30-day prevalence dropped insignificantly from 1977. 2,3,4
- One of the largest increases in cocaine use between 1977 and 1978 occurred in the large cities, where annual prevalence jumped by almost half, up to 12% ($p = .001$), thus heightening the already strong association between cocaine use and urbanicity. 2,3,4
- The Northeast, which is heavily urban, showed a similar 4% jump up to nearly 12% ($p = .001$), which for the first time made it the region exhibiting the highest level of cocaine use. While all regions have been showing a relatively steady increase in use since 1975, the rate of increase has been greatest in the Northeast where estimated annual prevalence has more than doubled in three years. 2,3,4
- The North Central region also showed a statistically significant increase in use this year. The South, in contrast to the other regions, has had a very gradual increase in cocaine use since 1975. 2,3,4
- The other subgroups (males and females, college-bound and noncollege-bound) have all shown rather steady and statistically significant increases in cocaine use since 1975. 2,3,4

Use at Earlier Grade Levels

- Of those in the class of 1978 who have used cocaine, most first users tried it in tenth, eleventh, or twelfth grade. 7
Fig 2

Table(s)

Unlike most other drugs, there is not much of a tendency for the rate of initiation to decline by twelfth grade, suggesting that the acquisition of this drug using behavior occurs at older age levels than most of the other drugs.

- During the years for which we can reconstruct prevalence estimates at earlier grade levels, using retrospective data from these four cohorts, cocaine use has been rising for most grade levels—particularly 9th, 10th, and 11th grades. However, there is the suggestion of leveling around 1975 in prevalence rates for 9th and 10th graders, though another year's data certainly would be needed to confirm this. If true, it suggests that most of the increase from cohort to cohort among high school seniors is now due to increased initiation rates in 11th and 12th grades, but not earlier. Fig 1
- Subgroup differences in early initiation largely mirror those discussed earlier for prevalence in 12th grade. Thus more males, noncollege-bound students, and students in the West and Northeast begin cocaine use at an early age. However, the differences eventually associated with urbanicity do not really show up until tenth grade. 8
- The slight (non-significant) decline between the classes of 1977 and 1978 in use prior to tenth grade, is also observed among most subgroups. Only the Northeast and North Central show a slight (non-significant) contrary trend. 9

Probability of Future Use

- The proportion of students indicating that they may use cocaine in the future has increased slightly. About 8% of 1978 seniors say they will "probably" or "definitely" be using cocaine five years in the future, which represents a doubling over the last three years. 6
- About 75% of the 1978 seniors say they "definitely will not" use cocaine five years in the future, a drop from 81% in 1975. (The three-year trend is significant at the .001 level.) 6

Degree and Duration of Highs

- Most seniors who used cocaine in the prior year say that they usually get either "moderately high" (38%) or "very high" (39%). 10
- The largest number of users (40%) say they usually stay high from 3 to 6 hours on cocaine, though a substantial number (33%) say their highs last only one to two hours. Another 21% say they stay high longer than 6 hours. 10

- There has been no consistent upward or downward trend over the last four years either in the degree or the duration of the highs experienced by cocaine users (except that by 1978 very few users claimed that their highs lasted as long as 24 hours).

TABLE 5-1

Cocaine: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
(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	17800	12.9	3.9	5.1	3.9	87.1
Sex:						
Male	8200	15.6	5.0	6.4	4.2	84.4
Female	9000	9.9	2.6	3.9	3.4	90.1
College Plans:						
None or under 4 yrs	7500	14.2	4.0	5.5	4.7	85.8
Complete 4 yrs	8900	10.4	3.3	4.4	2.7	89.6
Region:						
Northeast	4600	16.0	5.7	6.1	4.2	84.0
North Central	5400	12.2	3.4	5.1	3.7	87.8
South	5000	10.5	2.7	4.1	3.7	89.5
West	2800	14.3	4.9	5.7	3.7	85.7
Population Density:						
Large SMSA	5500	16.4	5.7	6.6	4.1	83.6
Other SMSA	8100	12.8	3.9	5.0	3.9	87.2
Non-SMSA	4200	9.9	2.5	3.9	3.5	90.1

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 1978)	Percent ever used				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	9.0	9.7	10.8	12.9	+2.1 <i>ss</i>
Sex:						
Male	8200	11.2	11.9	13.3	15.6	+2.3 <i>ss</i>
Female	9000	6.9	7.4	8.0	9.9	+1.9 <i>ss</i>
College Plans:						
None or under 4 yrs	7500	NA	10.8	12.0	14.2	+2.2 <i>ss</i>
Complete 4 yrs	8900	NA	7.8	8.6	10.4	+1.8 <i>ss</i>
Region:						
Northeast	4600	8.8	10.3	11.9	16.0	+4.1 <i>ss</i>
North Central	5400	8.5	9.0	9.7	12.2	+2.5 <i>s</i>
South	5000	8.3	8.9	9.7	10.5	+0.8
West	2800	11.6	12.1	13.1	14.4	+1.3
Population Density:						
Large SMSA	5500	11.1	12.7	13.1	16.4	+3.3 <i>ss</i>
Other SMSA	8100	9.6	9.5	10.7	12.8	+2.1 <i>s</i>
Non-SMSA	4200	6.9	7.8	8.9	9.9	+1.0

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					'77-'78 <i>change</i>
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	5.6	6.0	7.2	9.0	+1.8 <i>sss</i>	
Sex:							
Male	8200	7.5	7.5	9.3	11.4	+2.1 <i>ss</i>	
Female	9000	3.9	4.4	4.9	6.5	+1.6 <i>ss</i>	
College Plans:							
None or under 4 yrs	7500	NA	6.6	8.1	9.5	+1.4 <i>s</i>	
Complete 4 yrs	8900	NA	5.0	5.5	7.7	+2.2 <i>sss</i>	
Region:							
Northeast	4500	5.3	6.6	7.9	11.8	+3.9 <i>sss</i>	
North Central	5400	5.1	5.5	6.3	8.5	+2.2 <i>ss</i>	
South	5000	5.4	5.1	6.0	6.8	+0.8	
West	2800	7.8	7.9	10.2	10.7	+0.5	
Population Density:							
Large SMSA	5500	7.3	8.6	8.6	12.3	+3.7 <i>sss</i>	
Other SMSA	8100	5.9	5.8	7.3	8.9	+1.6 <i>s</i>	
Non-SMSA	4200	4.3	4.3	5.8	6.4	+0.6	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 9-4

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

	Number of Cases (Class of 1978)	<u>Percent who used in last thirty days</u>					'77-'78 <u>change</u>
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	1.9	2.0	2.9	3.9	+1.0 <i>sss</i>	
Sex:							
Male	8200	2.5	2.5	3.9	5.0	+1.1 <i>ss</i>	
Female	9000	1.2	1.4	1.9	2.6	+0.7 <i>s</i>	
College Plans:							
None or under 4 yrs	7500	NA	2.2	3.3	4.0	+0.7	
Complete 4 yrs	8900	NA	1.6	2.1	3.3	+1.2 <i>sss</i>	
Region:							
Northeast	4600	1.7	2.4	3.5	5.7	+2.2 <i>ss</i>	
North Central	5400	1.7	1.6	2.4	3.4	+1.0 <i>s</i>	
South	5000	1.6	1.6	2.2	2.7	+0.5	
West	2800	3.1	3.4	4.8	4.8	0.0	
Population Density:							
Large SMSA	5500	2.6	3.5	3.8	5.7	+1.9 <i>ss</i>	
Other SMSA	8100	1.9	1.8	2.6	3.9	+1.3 <i>ss</i>	
Non-SMSA	4200	1.4	1.3	2.6	2.5	-0.1	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978
(Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	91.0	5.1	1.7	0.9	0.7	0.3	0.3
Sex:								
Male	8200	88.6	6.3	2.2	1.2	1.0	0.3	0.3
Female	9000	93.5	3.7	1.3	0.6	0.4	0.3	0.2
College Plans:								
None or under 4 yrs	7500	90.5	5.4	1.9	0.8	0.9	0.4	0.2
Complete 4 yrs	8900	92.3	4.3	1.5	0.9	0.5	0.2	0.3
Region:								
Northeast	4600	88.2	6.7	2.3	1.1	1.0	0.5	0.3
North Central	5400	91.5	4.8	1.7	0.8	0.7	0.2	0.2
South	5000	93.2	3.9	1.3	0.7	0.6	0.2	0.2
West	2800	89.4	5.7	1.9	1.3	0.7	0.5	0.5
Population Density:								
Large SMSA	5500	87.7	6.3	2.7	1.5	0.9	0.6	0.3
Other SMSA	8100	91.1	5.1	1.7	0.9	0.7	0.3	0.3
Non-SMSA	4200	93.6	4.0	1.0	0.5	0.7	0.2	0.1

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>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	91.0	90.3	89.2	87.1
1-2 occasions	4.3	5.1	5.4	6.7
3-5 occasions	2.0	2.0	1.9	2.5
6-9 occasions	0.9	1.0	1.2	1.4
10-19 occasions	0.8	0.7	1.1	1.0
20-39 occasions	0.5	0.5	0.5	0.6
40 or more	0.4	0.4	0.6	0.7
	N = (9874)	(15930)	(17689)	(18203)
<u>Use in last twelve months</u>				
No occasions	94.4	94.0	92.8	91.0
1-2 occasions	3.3	3.5	4.0	5.1
3-5 occasions	1.0	1.2	1.3	1.7
6-9 occasions	0.6	0.6	0.9	0.9
10-19 occasions	0.4	0.4	0.5	0.7
20-39 occasions	0.2	0.2	0.2	0.3
40 or more	0.2	0.1	0.2	0.3
	N = (9864)	(15910)	(17676)	(18178)
<u>Use in last thirty days</u>				
No occasions	98.1	98.0	97.1	96.1
1-2 occasions	1.2	1.4	1.9	2.5
3-5 occasions	0.4	0.3	0.6	0.8
6-9 occasions	0.1	0.2	0.3	0.4
10-19 occasions	0.0	0.1	0.1	0.2
20-39 occasions	0.0	0.0	0.0	0.1
40 or more	0.0	0.0	0.0	0.1
	N = (9861)	(15904)	(17669)	(18175)
<u>Probability of future use</u>				
Definitely will not	81.2	79.3	77.1	74.6
Probably will not	15.1	15.7	16.7	17.6
Probably will	3.0	3.9	4.9	6.3
Definitely will	0.8	1.1	1.2	1.5
	N = (2894)	(3071)	(3435)	(3513)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.0	0.0	0.2	0.1
Seventh or Eighth grade	0.3	0.3	0.5	0.5
Ninth grade	0.8	1.2	2.0	1.6
Tenth grade	1.5	2.9	2.4	2.4
Eleventh grade	3.6	3.1	3.6	4.6
Twelfth grade	2.8	2.1	2.0	3.7
Never used	91.0	90.3	89.2	87.1
	N ^a = (2915)	(2947)	(6160)	(6185)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

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TABLE 5-8

Cocaine: Grade in Which First Used by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.1	0.5	1.6	2.4	4.6	3.7	87.1
Sex:								
Male	2800	0.2	0.6	2.1	2.5	5.5	4.6	84.4
Female	3100	0.0	0.5	1.0	2.3	3.3	2.9	90.1
College Plans:								
None or under 4 yrs	2500	0.3	0.7	1.7	2.6	5.7	3.3	85.8
Complete 4 yrs	3100	0.0	0.3	1.2	1.7	3.5	3.7	89.6
Region:								
Northeast	1400	0.1	0.5	2.0	3.0	5.1	5.3	84.0
North Central	2000	0.0	0.5	1.7	2.7	4.1	3.2	87.8
South	1600	0.1	0.3	1.0	2.0	4.2	2.8	89.5
West	1000	0.2	0.9	1.5	2.7	5.0	4.0	85.6
Population Density:								
Large SMSA	1800	0.1	0.5	1.8	2.9	5.1	6.0	83.6
Other SMSA	2800	0.1	0.8	1.6	2.4	4.5	3.5	87.2
Non-SMSA	1400	0.3	0.1	1.4	1.9	4.1	2.2	90.1

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	1.1	1.5	2.7	2.2	-0.5	
Sex:							
Male	2800	1.3	1.9	3.2	2.9	-0.3	
Female	3100	1.0	1.0	2.0	1.5	-0.5	
College Plans:							
None or under 4 yrs	2500	NA	1.5	2.8	2.7	-0.1	
Complete 4 yrs	3100	NA	1.4	2.0	1.5	-0.5	
Region:							
Northeast	1400	1.3	1.8	2.3	2.6	+0.3	
North Central	2000	0.7	1.3	1.9	2.2	+0.3	
South	1600	0.7	1.7	3.0	1.7	-1.6 <i>ss</i>	
West	1000	1.9	1.6	4.4	2.6	-1.8	
Population Density:							
Large SMSA	1800	1.5	2.6	2.7	2.4	-0.3	
Other SMSA	2800	1.3	1.6	2.8	2.5	-0.3	
Non-SMSA	1400	0.4	0.7	2.2	1.8	-0.4	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 5-10

Cocaine: Trends in Degree and Duration of Feeling High

Q. <i>When you take cocaine how high do you usually get?</i>	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
PERCENT OF RECENT USERS:^a				
I don't take it to get high	1.1	0.8	0.3	0.0
Not at all high	3.5	2.9	4.5	5.5
A little high	18.8	11.8	17.9	17.6
Moderately high	40.1	45.1	45.9	38.2
Very high	36.6	39.5	31.4	38.6
	N = (124)	(183)	(260)	(335)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.4	94.0	92.8	91.0
I don't take it to get high	0.1	0.0	0.0	0.0
Not at all high	0.2	0.2	0.3	0.5
A little high	1.1	0.7	1.3	1.6
Moderately high	2.2	2.7	3.3	3.4
Very high	2.0	2.4	2.3	3.5
	N = (2214)	(3050)	(3611)	(3722)
Q. <i>When you take cocaine how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	3.4	2.8	3.6	5.8
One to two hours	31.0	27.6	31.9	33.2
Three to six hours	47.5	46.8	49.4	39.6
Seven to 24 hours	14.4	19.6	13.1	20.9
More than 24 hours	3.7	3.1	1.9	0.5
	N = (125)	(182)	(256)	(331)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.4	94.0	92.8	91.0
Usually don't get high	0.2	0.2	0.3	0.5
One to two hours	1.7	1.7	2.3	3.0
Three to six hours	2.7	2.8	3.6	3.6
Seven to 24 hours	0.8	1.2	0.9	1.9
More than 24 hours	0.2	0.2	0.1	0.0
	N = (2232)	(3033)	(3556)	(3678)

^aFigures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 5-1

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

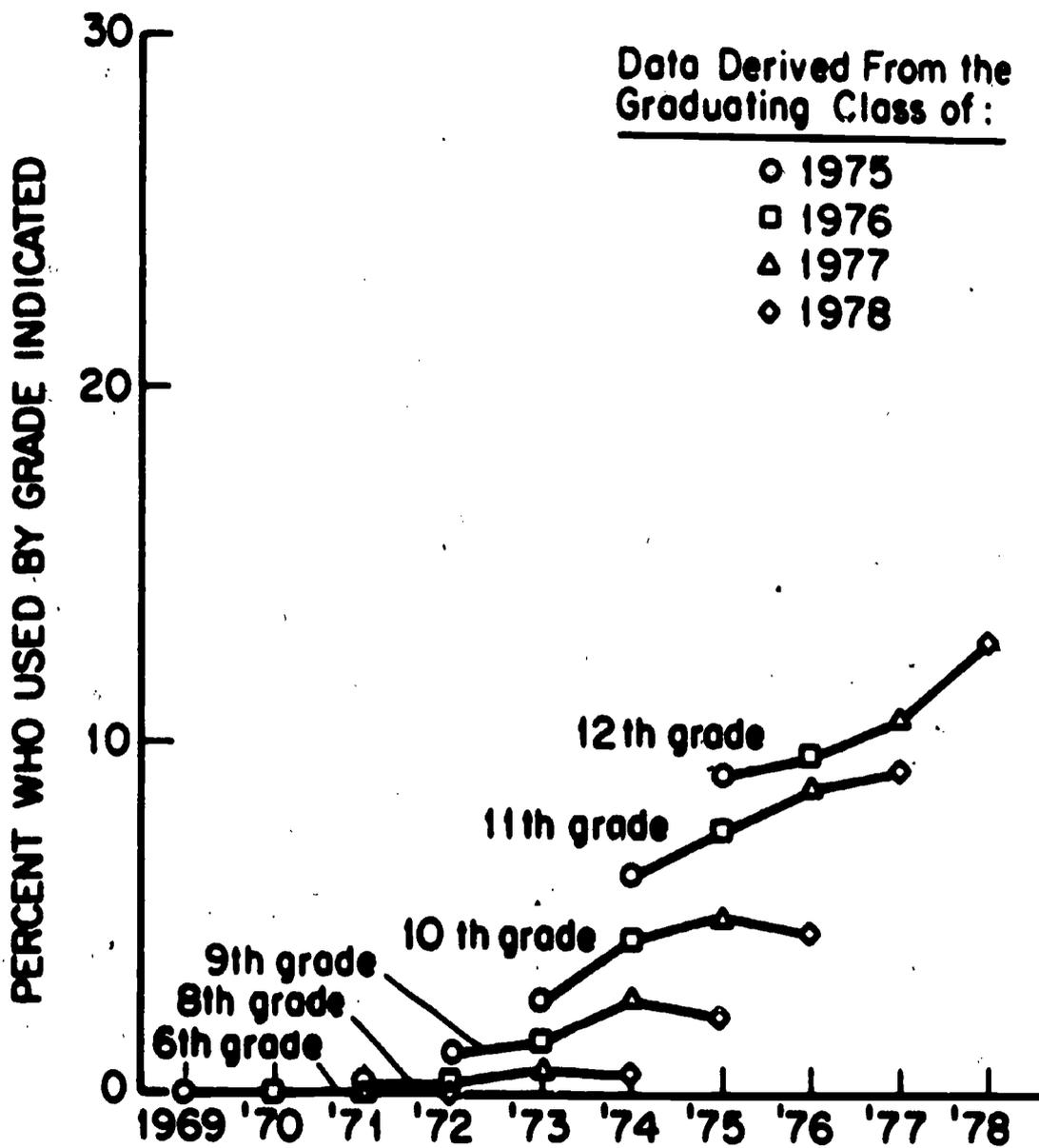
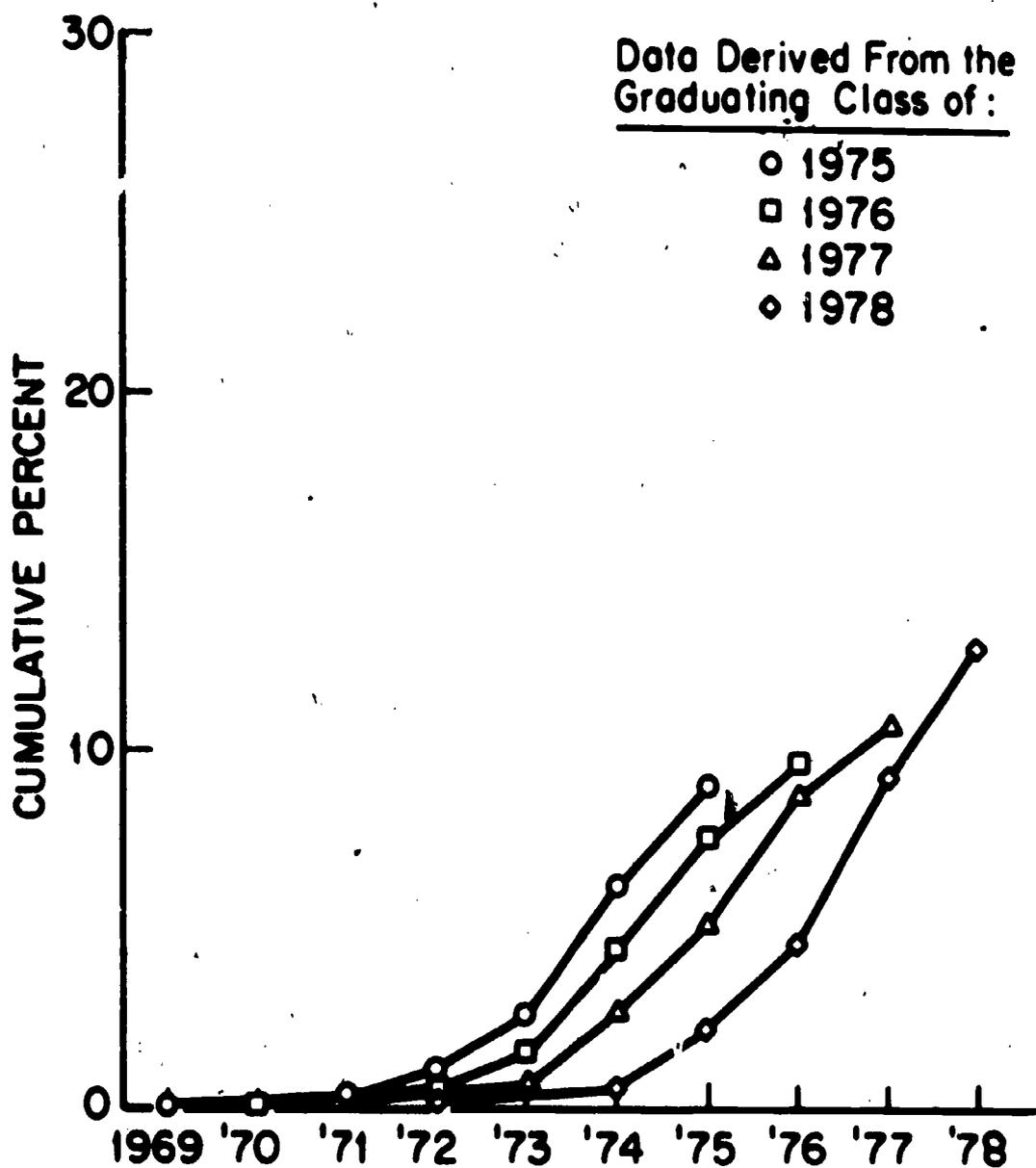


FIGURE 5-2

Cocaine: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

Chapter 6

HEROIN

Heroin is the drug most widely perceived among high school students as carrying a great risk of harm for 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, however, we feel that trends may be estimated more reliably than absolute prevalence levels.

Prevalence of Use in 1978

<u>Total Sample</u>	<u>Table(s)</u>
● Fewer than one out of every 60 respondents (1.6%) report ever having used heroin, and fewer than one in a hundred (0.8%) indicate use in the last year.	2,3
● The number indicating use in the prior 30 days is 0.3% (or about 53 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 four years of the study. 2,3,4
- Sex Differences. The prevalence rates for males appear to be somewhat higher than for females. For example, the annual prevalence figures in 1978 were 1.1 for males and 0.6% for females (difference significant at .01 level). Current use is even more disproportionately concentrated among males. 2,3,4
- College Plans. Those who do not plan to complete four years of college have somewhat higher prevalence rates than those who do. In 1978, the annual prevalence statistics were 1.0% and 0.6%, respectively (difference significant at .05 level). 2,3,4

- Region of the Country. Some regional differences were evident in 1978, but they have not been consistent across years and are too small to interpret reliably.

2,3,4

Recent Trends in PrevalenceTotal Sample

- There has been little change between 1976 and 1978 in lifetime prevalence (1.8% in 1976 vs. 1.6% in 1978) and no change in annual prevalence (0.8% during that period). In 1975 the prevalence rates for both reporting intervals were slightly higher (2.2% and 1.0%, respectively).
- Thirty-day prevalence showed no consistent trend from 1975 to 1978.

2,3

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 must be taken only as suggestive—certainly not as conclusive.
- The lifetime and annual prevalence figures suggest that there may be a gradual decline in heroin use in the Northeastern and North Central regions of the country, both of which have shown small but consistent drops from year to year.
- While the progress has not been quite as consistent, the large cities have also shown a decline (from 1.3% annual prevalence in 1975 to 0.7% in 1978, statistically significant at the $p \leq .05$ level). There is no evidence of a comparable decline in the less urban areas.

2,3,4

2,3,4

Use at Earlier Grade Levels

- Since only 1.6% report having ever used heroin, the percentages reporting first use at any particular grade level are extremely low. The great majority of those having any experience with the drug started in ninth grade or later. In none of the four cohorts studied here have more than 0.2% of the respondents reported initial heroin use prior to ninth grade.
- For the years for which we can reconstruct prevalence estimates at earlier grade levels (using retrospective data from these four cohorts) heroin prevalence has been relatively level at all grade levels.

7

Fig 1

Table(s)

- Put another way, there are no consistent trends in age of onset when the classes of 1975, 1976, 1977, and 1978 are compared. 7,9
Fig 2

Probability of Future Use

- About 1% of seniors surveyed in 1978 say they "definitely" or "probably" would be using heroin five years in the future, about the same proportion as reported any use in the last year. This represents no change from 1975 through 1978. 6
- About 92% of 1978 seniors say they "definitely will not" use heroin five years in the future and another 7.5% say they "probably will not." As might be expected, these proportions are higher than for any other drug class covered in the survey. 6

Degree and Duration of Highs

- On one questionnaire form seniors who reported using any heroin in the prior twelve months were asked to rate the degree and duration of the highs they usually experience when using the drug. Thus only about 20 respondents have been eligible to answer these questions each year. 10
- Most of those users (56% in 1978) report that they usually get "very high" on heroin. 10
- Nearly all users indicate that they usually stay high at least 3 hours, and nearly half say they stay high for longer than 6 hours. 10
- There is no evidence of any consistent directional trend in the degree or duration of highs on heroin.

TABLE 6-1

Heroin: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	1.6	0.3	0.5	0.8	98.4
Sex:						
Male	8200	2.0	0.6	0.5	0.9	98.0
Female	9000	1.2	0.1	0.5	0.6	98.8
College Plans:						
None or under 4 yrs	7500	1.9	0.4	0.6	0.9	98.1
Complete 4 yrs	8900	1.2	0.2	0.4	0.6	98.8
Region:						
Northeast	4600	1.3	0.3	0.3	0.7	98.7
North Central	5400	1.4	0.2	0.6	0.6	98.6
South	5000	2.1	0.5	0.6	1.0	97.9
West	2800	1.6	0.3	0.5	0.8	98.4
Population Density:						
Large SMSA	5500	1.4	0.3	0.4	0.7	98.6
Other SMSA	8100	1.8	0.3	0.5	1.0	98.2
Non-SMSA	4200	1.6	0.4	0.6	0.6	98.4

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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	2.2	1.8	1.8	1.6	-0.2	
Sex:							
Male	8200	2.7	2.4	2.4	2.0	-0.4	
Female	9000	1.7	1.2	1.1	1.2	+0.1	
College Plans:							
None or under 4 yrs	7500	NA	2.3	2.2	1.9	-0.3	
Complete 4 yrs	8900	NA	1.3	1.2	1.2	0.0	
Region:							
Northeast	4600	1.9	1.7	1.5	1.3	-0.2	
North Central	5400	2.6	2.0	1.9	1.4	-0.5	
South	5000	2.1	2.0	2.1	2.1	0.0	
West	2800	1.8	1.4	1.2	1.6	+0.4	
Population Density:							
Large SMSA	5500	2.5	2.1	1.4	1.4	0.0	
Other SMSA	8100	2.2	2.1	1.7	1.8	+0.1	
Non-SMSA	4200	1.9	1.3	2.2	1.6	-0.6	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	1.0	0.8	0.8	0.8	0.0	
Sex:							
Male	8200	1.2	1.0	1.2	1.1	-0.1	
Female	9000	0.8	0.5	0.4	0.6	+0.2	
College Plans:							
None or under 4 yrs	7500	NA	0.9	1.1	1.0	-0.1	
Complete 4 yrs	8900	NA	0.6	0.5	0.6	+0.1	
Region:							
Northeast	4600	1.1	0.7	0.7	0.6	-0.1	
North-Central	5400	1.3	1.0	1.0	0.8	-0.2	
South	5000	0.9	0.7	0.9	1.1	+0.2	
West	2800	0.7	0.6	0.5	0.8	+0.3	
Population Density:							
Large SMSA	5500	1.3	1.0	0.5	0.7	+0.2	
Other SMSA	8100	0.9	1.0	0.8	0.8	0.0	
Non-SMSA	4200	1.0	0.4	1.1	1.0	-0.1	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	0.4	0.2	0.3	0.3	0.0	
Sex:							
Male	8200	0.4	0.3	0.5	0.6	+0.1	
Female	9000	0.3	0.1	0.2	0.1	-0.1	
College Plans:							
None or under 4 yrs	7500	NA	0.2	0.4	0.4	0.0	
Complete 4 yrs	8900	NA	0.2	0.2	0.2	0.0	
Region:							
Northeast	4600	0.3	0.3	0.5	0.3	-0.2	
North Central	5400	0.6	0.2	0.4	0.2	-0.2	
South	5000	0.4	0.2	0.2	0.5	+0.3	
West	2800	0.3	0.1	0.2	0.3	+0.1	
Population Density:							
Large SMSA	5500	0.5	0.3	0.3	0.3	0.0	
Other SMSA	8100	0.3	0.2	0.3	0.3	0.0	
Non-SMSA	4200	0.5	0.1	0.4	0.4	0.0	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	99.2	0.5	0.1	0.1	0.1	0.0	0.0
Sex:								
Male	8200	98.9	0.6	0.2	0.1	0.1	0.0	0.1
Female	9000	99.4	0.4	0.1	0.0	0.1	0.0	0.0
College Plans:								
None or under 4 yrs	7500	99.0	0.7	0.1	0.0	0.1	0.0	0.1
Complete 4 yrs	8900	99.4	0.3	0.1	0.1	0.1	0.0	0.0
Region:								
Northeast	4600	99.4	0.4	0.0	0.0	0.1	0.0	0.1
North Central	5400	99.2	0.5	0.1	0.1	0.1	0.0	0.0
South	5000	98.9	0.6	0.2	0.1	0.1	0.0	0.0
West	2800	99.2	0.6	0.1	0.0	0.0	0.0	0.0
Population Density:								
Large SMSA	5500	99.3	0.5	0.1	0.0	0.1	0.0	0.1
Other SMSA	8100	99.2	0.5	0.1	0.1	0.0	0.0	0.0
Non-SMSA	4200	99.0	0.5	0.1	0.1	0.2	0.0	0.0

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>Class of 1978</u>
<u>Lifetime use</u>				
No occasions	97.8	98.2	98.2	98.4
1-2 occasions	1.4	1.2	1.1	1.1
3-5 occasions	0.2	0.2	0.2	0.3
6-9 occasions	0.1	0.1	0.1	0.1
10-19 occasions	0.2	0.1	0.1	0.1
20-39 occasions	0.0	0.0	0.1	0.1
40 or more	0.2	0.1	0.1	0.1
	N = (9494)	(15895)	(17609)	(18141)
<u>Use in last twelve months</u>				
No occasions	99.0	99.2	99.2	99.2
1-2 occasions	0.6	0.5	0.5	0.5
3-5 occasions	0.1	0.1	0.1	0.1
6-9 occasions	0.1	0.1	0.1	0.1
10-19 occasions	0.1	0.0	0.0	0.1
20-39 occasions	0.0	0.0	0.0	0.0
40 or more	0.1	0.0	0.1	0.0
	N = (9525)	(15893)	(17602)	(18142)
<u>Use in last thirty days</u>				
No occasions	99.6	99.8	99.7	99.7
1-2 occasions	0.2	0.1	0.2	0.2
3-5 occasions	0.1	0.0	0.1	0.1
6-9 occasions	0.0	0.0	0.0	0.0
10-19 occasions	0.0	0.0	0.0	0.0
20-39 occasions	0.0	0.0	0.0	0.0
40 or more	0.1	0.0	0.0	0.0
	N = (9527)	(15894)	(17601)	(18142)
<u>Probability of future use</u>				
Definitely will not	90.9	91.8	90.3	91.6
Probably will not	8.2	7.4	8.6	7.5
Probably will	0.3	0.3	0.5	0.4
Definitely will	0.6	0.5	0.6	0.6
	N = (2867)	(2980)	(3370)	(3416)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.1	0.0	0.1	0.1
Seventh or Eighth grade	0.1	0.2	0.1	0.1
Ninth grade	0.1	0.3	0.4	0.3
Tenth grade	0.7	0.6	0.4	0.3
Eleventh grade	0.4	0.5	0.6	0.4
Twelfth grade	0.6	0.3	0.2	0.3
Never used	97.8	98.2	98.2	98.4
	N ^a = (2898)	(2958)	(6189)	(6237)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 6-8

Heroin: Grade in Which First Used by Subgroups, Class of 1978

(Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.1	0.1	0.3	0.3	0.4	0.3	98.4
Sex:								
Male	2800	0.3	0.2	0.3	0.2	0.6	0.5	98.0
Female	3100	0.0	0.1	0.3	0.4	0.3	0.1	98.8
College Plans:								
None or under 4 yrs	2500	0.4	0.2	0.4	0.2	0.6	0.2	98.1
Complete 4 yrs	3100	0.0	0.1	0.1	0.1	0.5	0.3	98.8
Region:								
Northeast	1400	0.0	0.0	0.4	0.3	0.5	0.1	98.7
North Central	2000	0.0	0.1	0.2	0.6	0.2	0.2	98.6
South	1600	0.4	0.2	0.2	0.0	0.6	0.6	97.9
West	1000	0.1	0.5	0.4	0.0	0.5	0.1	98.4
Population Density:								
Large SMSA	1800	0.0	0.0	0.2	0.5	0.5	0.3	98.6
Other SMSA	2800	0.2	0.5	0.3	0.0	0.6	0.3	98.2
Non-SMSA	1400	0.3	0.0	0.4	0.4	0.3	0.3	98.4

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	0.3	0.5	0.6	0.5	-0.1	
Sex:							
Male	2800	0.6	0.8	0.6	0.8	+0.2	
Female	3100	0.2	0.3	0.3	0.4	+0.1	
College Plans:							
None or under 4 yrs	2900	NA	0.6	0.5	1.0	+0.5	
Complete 4 yrs	3100	NA	0.5	0.4	0.2	-0.2	
Region:							
Northeast	1400	0.6	0.9	0.5	0.4	-0.1	
North Central	2000	0.4	0.7	0.3	0.3	0.0	
South	1600	0.2	0.7	0.6	0.8	+0.2	
West	1000	0.3	0.2	0.4	1.0	+0.6	
Population Density:							
Large SMSA	1800	0.9	0.4	0.5	0.2	-0.3	
Other SMSA	2800	0.4	0.6	0.5	1.0	+0.5 ^s	
Non-SMSA	1400	0.2	0.5	0.6	0.7	+0.1	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 6-10

Heroin: Trends in Degree and Duration of Feeling High

Q. <i>When you take heroin how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
I don't take it to get high	0.0	0.0	9.0	5.2
Not at all high	5.3	0.0	0.0	8.8
A little high	0.0	7.9	20.6	12.1
Moderately high	29.2	20.9	27.9	17.8
Very high	65.5	71.2	42.4	56.1
	N = (21)	(20)	(20)	(19)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	99.0	99.2	99.2	99.2
I don't take it to get high	0.0	0.0	0.1	0.0
Not at all high	0.1	0.0	0.0	0.1
A little high	0.0	0.1	0.2	0.1
Moderately high	0.3	0.2	0.2	0.1
Very high	0.7	0.6	0.3	0.4
	N = (2100)	(2500)	(2500)	(2375)
Q. <i>When you take heroin how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	5.3	0.0	0.0	0.0
One to two hours	15.2	20.0	22.6	8.8
Three to six hours	45.1	43.3	52.7	42.7
Seven to 24 hours	34.4	22.3	11.5	30.1
More than 24 hours	0.0	14.3	13.2	18.4
	N = (21)	(21)	(19)	(19)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	99.0	99.2	99.2	99.2
Usually don't get high	0.1	0.0	0.0	0.0
One to two hours	0.2	0.2	0.2	0.1
Three to six hours	0.5	0.3	0.4	0.3
Seven to 24 hours	0.3	0.2	0.1	0.2
More than 24 hours	0.0	0.1	0.1	0.1
	N = (2100)	(2625)	(2375)	(2375)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 6-1

Heroin: Reconstructed Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.

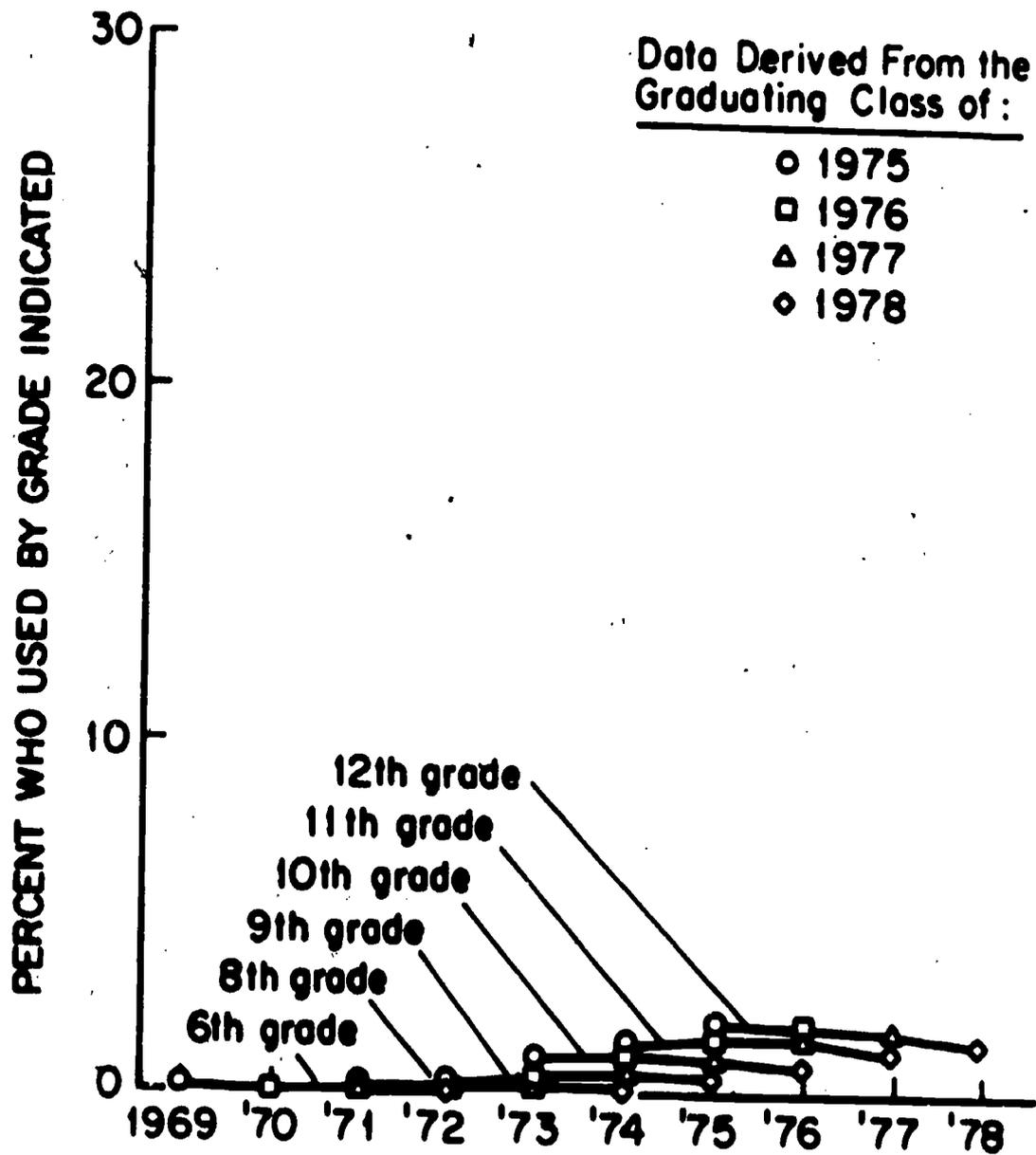
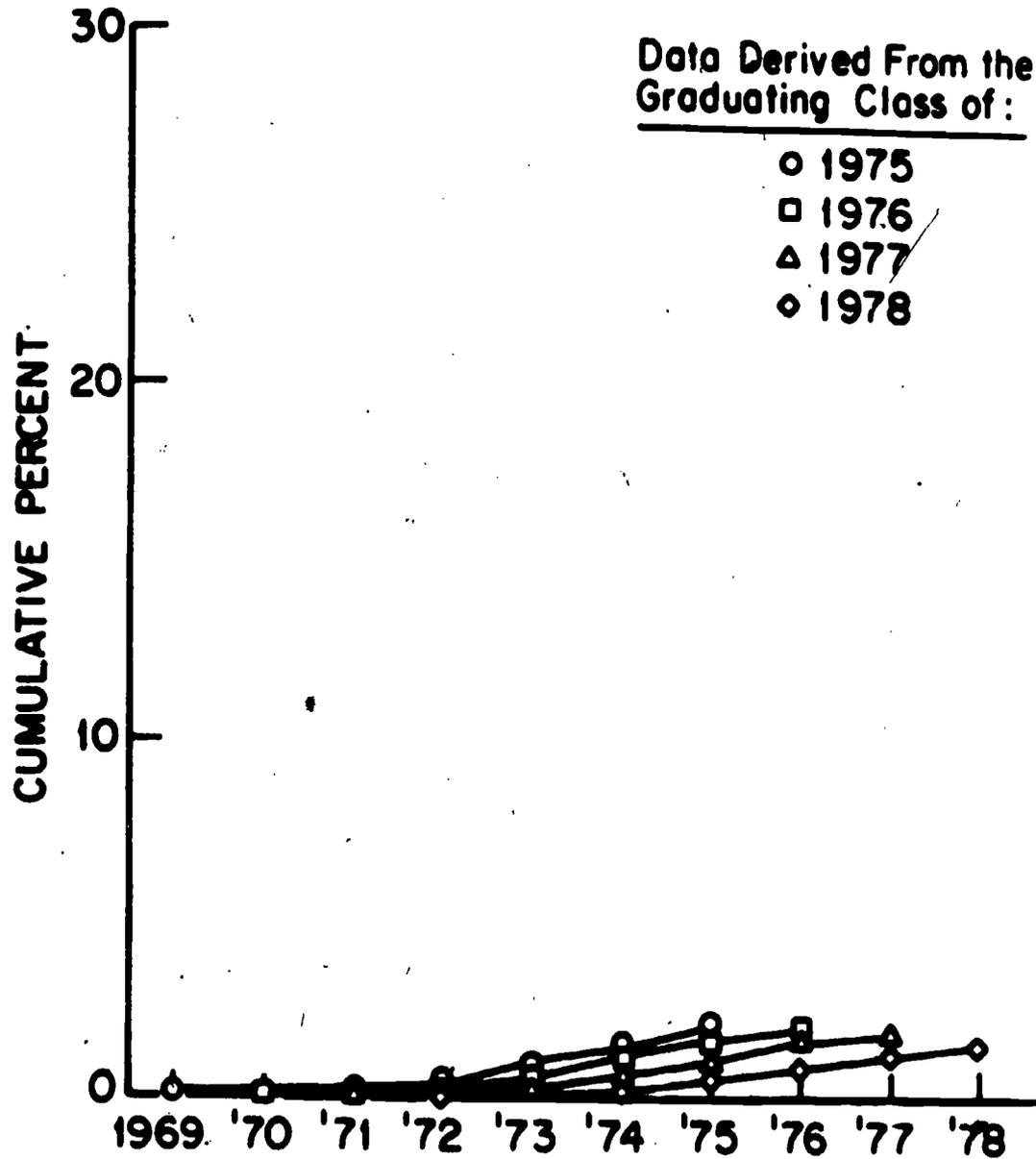


FIGURE 6-2

Heroin: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

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 1978, 14.1% said that they had done so, and it was the first time they had used such a substance. Another 1.8% 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 1978

<u>Total Sample</u>	<u>Table(s)</u>
● About one in ten students (9.9%) has used some opiate or opiate-like substance without medical supervision by the end of senior year. Nearly half of those had used it only once or twice, however.	2,6
● For the previous year 6.0% report some use, while the figure for the prior month is 2.1%.	3,4
● Relatively few (1.2%) report use on 20 or more occasions in their lifetime.	6
● Almost no one reports daily or near-daily use in the prior 30 days.	6

Subgroup Differences

- Sex Differences. The non-medical use of other opiates is a little higher among males than among females in all three time intervals. Annual prevalence is 6.9% for males vs. 5.1% for females. 2,3,4

- | | <u>Table(s)</u> |
|--|-----------------|
| ● <u>College Plans</u> . Other opiate use is somewhat more widespread among those not planning to attend a four-year college (6.8% used in the last year) than among those who do plan to attend (4.9% used in the same interval). | 2,3,4,5 |
| ● <u>Region of the Country</u> . There is one consistent but relatively small regional difference in the use of other opiates; the South generally has below average rates. This difference has been replicated over four years. | 2,3,4 |
| ● <u>Population Density</u> . There are consistent, though relatively small differences such that use is highest in large cities and lowest in non-metropolitan areas. This association with urbanicity has been replicated in all four years. | 2,3,4,5 |

Recent Trends in Prevalence

Total Sample

- | | |
|--|-----|
| ● Although there was a slight increase in reported lifetime prevalence from 9.0% in 1975 to 10.3% in 1977, there was a slight drop to 9.9% in 1978. | 2 |
| ● Annual and 30-day prevalence in 1978 show a similar small drop from 1977, following a small rise from 1976. All in all, annual and 30-day prevalence approximately equal their 1975 levels. | 3,4 |
| ● Frequent use shows the same two-year pattern, e.g., a small rise in 1977 followed by a small drop in 1978, leaving levels approximately equal to 1975 levels. Only 0.1% of 1978 seniors report using other opiates 10 or more times per month. | 6 |

Subgroup Differences in Trends

- | | |
|--|-------|
| ● No differential trends are discernible between the two sexes, among the regions of the country, or between college-bound and noncollege-bound seniors. | 2,3,4 |
|--|-------|

Use at Earlier Grade Levels

- | | |
|--|------------|
| ● As was true for heroin, most initiation to opiates other than heroin occurs in tenth grade or later. Only 1.5% of the 1978 sample report experience with such drugs prior to ninth grade. | 7
Fig 2 |
| ● However, each of these four cohorts reports a higher level of use at each earlier grade level than the preceding cohort. For example, lifetime prevalence by 10th grade rose steadily from 2.1% in the Class of 1975 to 3.2% in the Class of 1978. | 9
Fig 1 |

Table(s)

Fig 1

- Figure 1 shows that across the years for which we can reconstruct prevalence estimates using the retrospective data from the four graduating classes, the use of opiates other than heroin was going up at all grade levels until 1975. After 1975 there is evidence of leveling at the upper grade levels. (Comparable data do not yet exist for the lower grade levels.)* This leveling could reflect either a period effect (common to all age groups in that historical period) or a cohort effect (specific to one or even a few cohorts during that period).
- Subgroups differences in early prevalence (prior to tenth grade) are about what would be expected from the subgroup differences in twelfth grade, discussed earlier. 9
- Among all subgroups use prior to tenth grade of other opiates has increased between the classes of 1975 and 1978. A particularly large increase in such early use appears to have taken place in the West (from 1.8% to 5.8%) even though a comparable increase is not observed in twelfth grade prevalence for that region. 9

Probability of Future Use

- In 1978, only 3.2% of the seniors report they "probably" or "definitely" will be using other opiates five years in the future. 6
- There has been very little change in these statistics over the last three years. 6

Degree and Duration of Highs

- Seniors who used narcotics other than heroin during the prior twelve months without medical orders were asked to rate the degree and duration of the highs they usually experienced with such drugs.
- The most commonly chosen description of the degree of high experienced is "moderately high" (41%), while about a quarter say they usually get "very high." Thus, the highs tend to be less intense than with heroin. 10
- There is little evidence of a consistent direction of trend in the degree to which users report getting high, though 1975 is quite different from the other years. However, there does appear to be some increase in the small proportion of users 10

*Note that these grade level prevalence estimates are based only on the 80-85% of each age cohort who remain in school through the end of twelfth grade.

who say that they are not taking them for the purpose of getting high.

- Half of all users (50%) report that they usually remain high for a period of 3 to 6 hours. While the trend has been somewhat erratic, it appears that the average duration of highs for users of narcotics other than heroin may be declining. Users in 1975 and 1976 reported longer highs on the average than users in 1977 and 1978, which suggests that the quantity of drugs used per occasion may be declining. However, because of the relatively small numbers of cases each year, these interpretations must remain somewhat tentative.

10

TABLE 7-1

Other Opiates: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	9.9	2.1	3.9	3.9	90.1
Sex:						
Male	8200	11.2	2.5	4.4	4.3	88.8
Female	9000	8.6	1.7	3.4	3.5	91.4
College Plans:						
None or under 4 yrs	7500	11.3	2.6	4.2	4.5	88.7
Complete 4 yrs	8900	8.2	1.6	3.3	3.3	91.8
Region:						
Northeast	4600	11.0	2.5	4.3	4.2	89.0
North Central	5400	10.9	2.3	4.4	4.2	89.1
South	5000	8.0	1.7	2.8	3.5	92.0
West	2800	10.7	2.4	4.3	4.0	89.3
Population Density:						
Large SMSA	5500	11.3	2.3	4.6	4.4	88.7
Other SMSA	8100	10.1	2.1	3.8	4.2	89.9
Non-SMSA	4200	8.6	2.0	3.4	3.2	91.4

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 1978)	Percent ever used				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	9.0	9.6	10.3	9.9	-0.4
Sex:						
Male	8200	9.9	11.0	11.6	11.2	-0.4
Female	9000	8.3	8.1	9.0	8.6	-0.4
College Plans:						
None or under 4 yrs	7500	NA	11.1	12.6	11.3	-1.3
Complete 4 yrs	8900	NA	7.8	7.9	8.1	+0.2
Region:						
Northeast	4600	10.0	11.1	10.8	11.0	+0.2
North Central	5400	9.3	9.7	11.3	10.9	-0.4
South	5000	7.8	8.5	8.9	8.0	-0.9
West	2800	9.7	8.9	10.2	10.6	+0.4
Population Density:						
Large SMSA	9500	11.5	12.0	10.8	11.3	+0.5
Other SMSA	8100	9.2	9.9	10.6	10.1	-0.5
Non-SMSA	4200	7.3	7.4	9.5	8.6	-0.9

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	5.7	5.7	6.4	6.0	-0.4
Sex:						
Male	8200	6.6	6.8	7.3	6.9	-0.4
Female	9000	4.8	4.7	5.4	5.1	-0.3
College Plans:						
None or under 4 yrs	7500	NA	6.8	8.0	6.8	-1.2 ^s
Complete 4 yrs	8900	NA	4.6	4.7	4.9	+0.2
Region:						
Northeast	4600	6.1	6.5	6.6	6.8	+0.2
North Central	5400	6.2	6.2	7.5	6.7	-0.8
South	5000	4.9	5.0	5.2	4.5	-0.7
West	2900	5.4	5.0	6.0	6.7	+0.7
Population Density:						
Large SMSA	5500	7.3	6.7	6.7	6.9	+0.2
Other SMSA	8100	5.5	6.1	6.3	5.9	-0.4
Non-SMSA	4200	4.8	4.6	6.2	5.4	-0.8

NOTES: Level of significance of difference between the two most recent classes:

^s = .05, ^{ss} = .01, ^{sss} = .001.

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	17800	2.1	2.0	2.8	2.1	-0.7 <i>ss</i>
Sex:						
Male	8200	2.5	2.4	3.3	2.5	-0.8 <i>ss</i>
Female	9000	1.7	1.6	2.3	1.7	-0.6 <i>s</i>
College Plans:						
None or under 4 yrs	7500	NA	2.6	3.6	2.6	-1.0 <i>ss</i>
Complete 4 yrs	8900	NA	1.5	2.0	1.6	-0.4 <i>s</i>
Region:						
Northeast	4600	2.5	2.1	3.0	2.5	-0.5
North Central	5400	2.3	2.5	3.4	2.3	-1.1 <i>ss</i>
South	5000	1.9	1.6	2.4	1.7	-0.7 <i>s</i>
West	2800	1.9	1.8	2.4	2.3	-0.1
Population Density:						
Large SMSA	5500	3.3	2.6	3.0	2.3	-0.7
Other SMSA	8100	1.9	2.2	2.7	2.1	-0.6 <i>s</i>
Non-SMSA	4200	1.6	1.4	2.9	2.0	-0.9 <i>s</i>

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 7-5

Other Op:ates: Frequency of Use in the Last Year by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	94.0	3.2	1.2	0.7	0.4	0.2	0.2
Sex:								
Male	8200	93.1	3.5	1.5	0.8	0.6	0.3	0.3
Female	9000	94.9	2.9	1.0	0.5	0.3	0.2	0.1
College Plans:								
None or under 4 yrs	7500	93.2	3.5	1.4	0.7	0.6	0.3	0.3
Complete 4 yrs	8900	95.1	3.0	1.0	0.5	0.3	0.1	0.1
Region:								
Northeast	4600	93.2	3.8	1.4	0.6	0.6	0.3	0.3
North Central	5400	93.3	4.0	1.2	0.7	0.4	0.2	0.2
South	5000	95.5	2.2	1.1	0.6	0.3	0.2	0.1
West	2800	93.3	3.2	1.4	0.9	0.7	0.3	0.3
Population Density:								
Large SMSA	5500	93.1	3.8	1.6	0.7	0.4	0.3	0.1
Other SMSA	8100	94.1	3.2	1.2	0.6	0.4	0.2	0.3
Non-SMSA	4200	94.6	2.8	1.1	0.7	0.5	0.2	0.2

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)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	91.0	90.4	89.7	90.1
1-2 occasions	3.7	4.6	4.3	4.7
3-5 occasions	1.7	2.0	2.0	2.1
6-9 occasions	0.9	0.9	1.3	1.1
10-19 occasions	1.2	0.9	0.9	0.9
20-39 occasions	0.5	0.4	0.7	0.5
40 or more	1.0	0.8	1.1	0.7
	N = (9408)	(15741)	(17485)	(17996)
<u>Use in last twelve months</u>				
No occasions	94.3	94.3	93.6	94.0
1-2 occasions	2.6	3.2	3.1	3.2
3-5 occasions	1.1	1.1	1.3	1.2
6-9 occasions	0.8	0.6	0.6	0.7
10-19 occasions	0.6	0.4	0.7	0.4
20-39 occasions	0.2	0.3	0.4	0.2
40 or more	0.3	0.2	0.4	0.2
	N = (9410)	(15741)	(17468)	(17984)
<u>Use in last thirty days</u>				
No occasions	97.9	98.0	97.2	97.9
1-2 occasions	1.0	1.2	1.6	1.2
3-5 occasions	0.6	0.4	0.5	0.5
6-9 occasions	0.3	0.2	0.3	0.2
10-19 occasions	0.2	0.1	0.3	0.1
20-39 occasions	0.0	0.0	0.1	0.0
40 or more	0.0	0.1	0.1	0.0
	N = (9404)	(15738)	(17460)	(17975)
<u>Probability of future use</u>				
Definitely will not	81.0	79.2	79.2	79.0
Probably will not	16.6	17.3	17.3	17.8
Probably will	1.9	2.9	2.9	2.7
Definitely will	0.6	0.5	0.6	0.5
	N = (2888)	(3044)	(3419)	(3492)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.2	0.4	0.3	0.3
Seventh or Eighth grade	0.4	0.5	1.0	1.2
Ninth grade	1.5	1.7	1.6	1.7
Tenth grade	2.4	2.4	2.8	2.5
Eleventh grade	3.1	2.8	2.8	2.5
Twelfth grade	1.5	1.8	1.8	1.7
Never used	91.0	90.4	89.7	90.1
	N ^a = (2776)	(2859)	(5912)	(5969)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 7-8

Other Opiates: Grade in Which First Used by Subgroups, Class of 1978

(Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.3	1.2	1.7	2.5	2.5	1.7	90.1
Sex:								
Male	2800	0.5	1.3	2.0	2.9	2.7	1.8	88.8
Female	3100	0.2	1.0	1.5	2.3	2.3	1.5	91.4
College Plans:								
None or under 4 yrs	2500	0.6	0.9	2.4	3.0	2.6	1.9	88.7
Complete 4 yrs	3100	0.4	1.3	1.1	1.9	2.2	1.3	91.8
Region:								
Northeast	1400	0.2	0.8	1.7	2.8	3.4	2.3	89.0
North Central	2000	0.3	1.2	1.9	3.0	2.6	1.9	89.1
South	1600	0.6	1.0	1.0	2.1	2.3	1.0	92.0
West	1000	0.5	2.1	3.2	2.0	1.6	1.2	89.3
Population Density:								
Large SMSA	1800	0.4	1.1	1.8	2.5	3.6	2.0	88.7
Other SMSA	2800	0.3	1.3	1.8	2.6	2.4	1.6	89.9
Non-SMSA	1400	0.5	0.9	1.4	2.3	2.0	1.4	91.4

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	2.1	2.6	2.9	3.2	+0.3	
Sex:							
Male	2800	2.1	3.0	3.2	3.8	+0.6	
Female	3100	1.8	2.1	2.6	2.7	+0.1	
College Plans:							
None or under 4 yrs	2500	NA	2.8	3.4	3.9	+0.5	
Complete 4 yrs	3100	NA	2.1	2.7	2.8	+0.1	
Region:							
Northeast	1400	2.1	2.6	4.0	2.7	-1.3	
North Central	2000	2.0	2.6	3.4	3.4	0.0	
South	1600	2.1	2.7	2.3	2.6	+0.3	
West	1000	1.8	2.1	2.9	5.8	+2.9 ⁸⁸	
Population Density:							
Large SMSA	1800	1.7	3.3	3.0	3.3	+0.3	
Other SMSA	2800	2.6	2.4	3.2	3.4	+0.2	
Non-SMSA	1400	1.5	2.1	2.7	2.8	+0.1	

NOTES: Level of significance of difference between the two most recent classes:

$p = .05$, $sp = .01$, $888 = .001$.

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 7-10

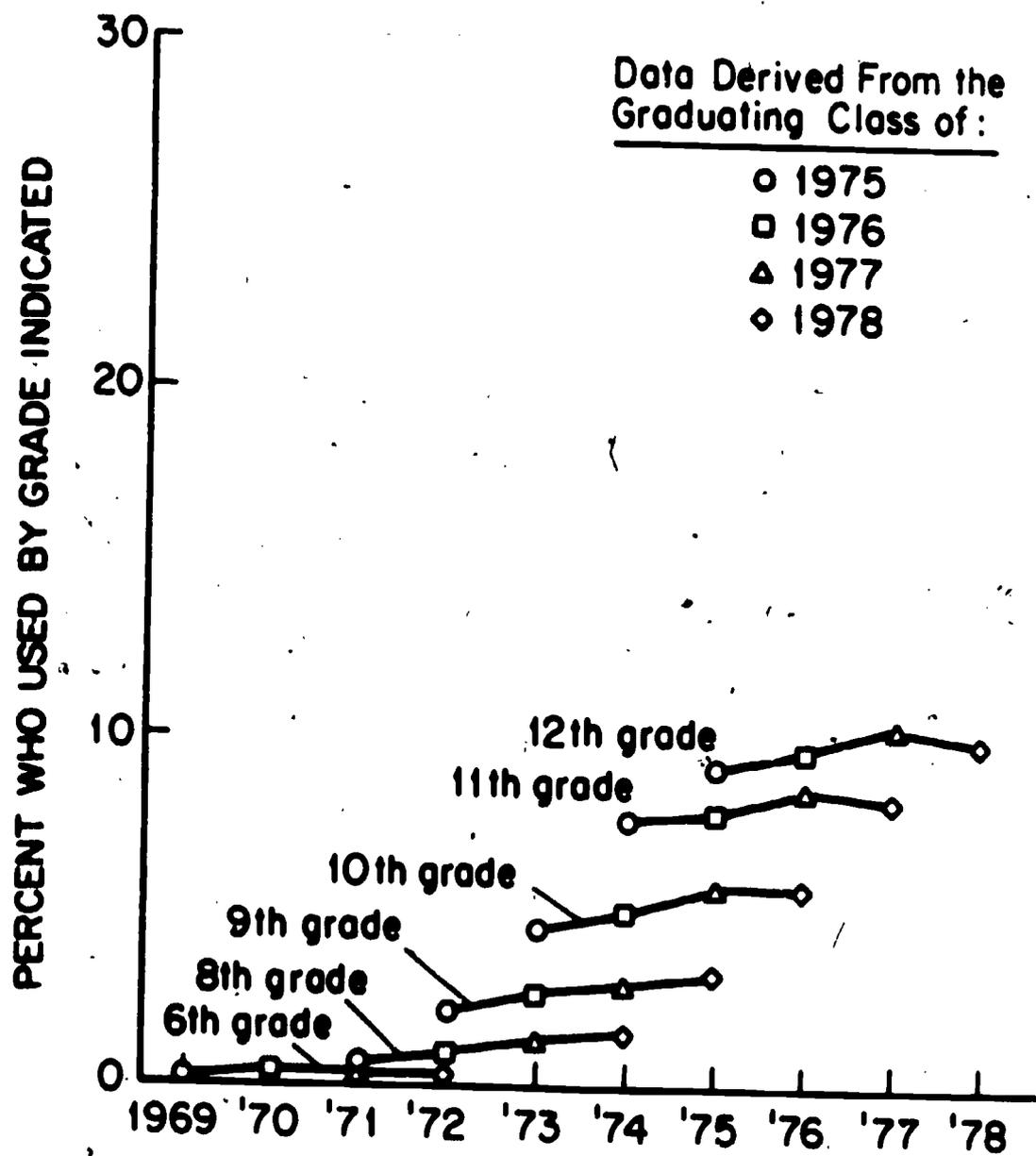
Other Opiates: Trends in Degree and Duration of Feeling High

Q. <i>When you take narcotics other than heroin how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
I don't take them to get high	4.1	7.6	7.8	10.4
Not at all high	3.6	6.1	2.8	5.9
A little high	8.8	18.3	25.9	17.5
Moderately high	45.0	40.4	37.5	41.4
Very high	38.5	27.5	26.0	24.8
N =	(78)	(143)	(144)	(179)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.3	94.3	93.6	94.0
I don't take them to get high	0.2	0.4	0.5	0.6
Not at all high	0.2	0.3	0.2	0.4
A little high	0.5	1.0	1.7	1.1
Moderately high	2.6	2.3	2.4	2.5
Very high	2.2	1.6	1.7	1.5
N =	(1368)	(2509)	(2250)	(2983)
Q. <i>When you take narcotics other than heroin how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	6.8	15.4	7.4	14.6
One to two hours	8.8	16.7	32.5	19.3
Three to six hours	56.5	44.1	46.2	50.2
Seven to 24 hours	24.5	20.5	11.1	15.9
More than 24 hours	3.4	3.2	2.8	0.0
N =	(78)	(143)	(144)	(173)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.3	94.3	93.6	94.0
Usually don't get high	0.4	0.9	0.5	0.9
One to two hours	0.5	1.0	2.1	1.2
Three to six hours	3.2	2.5	3.0	3.0
Seven to 24 hours	1.4	1.2	0.7	1.0
More than 24 hours	0.2	0.2	0.2	0.0
N =	(1368)	(2509)	(2250)	(2883)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 7-1

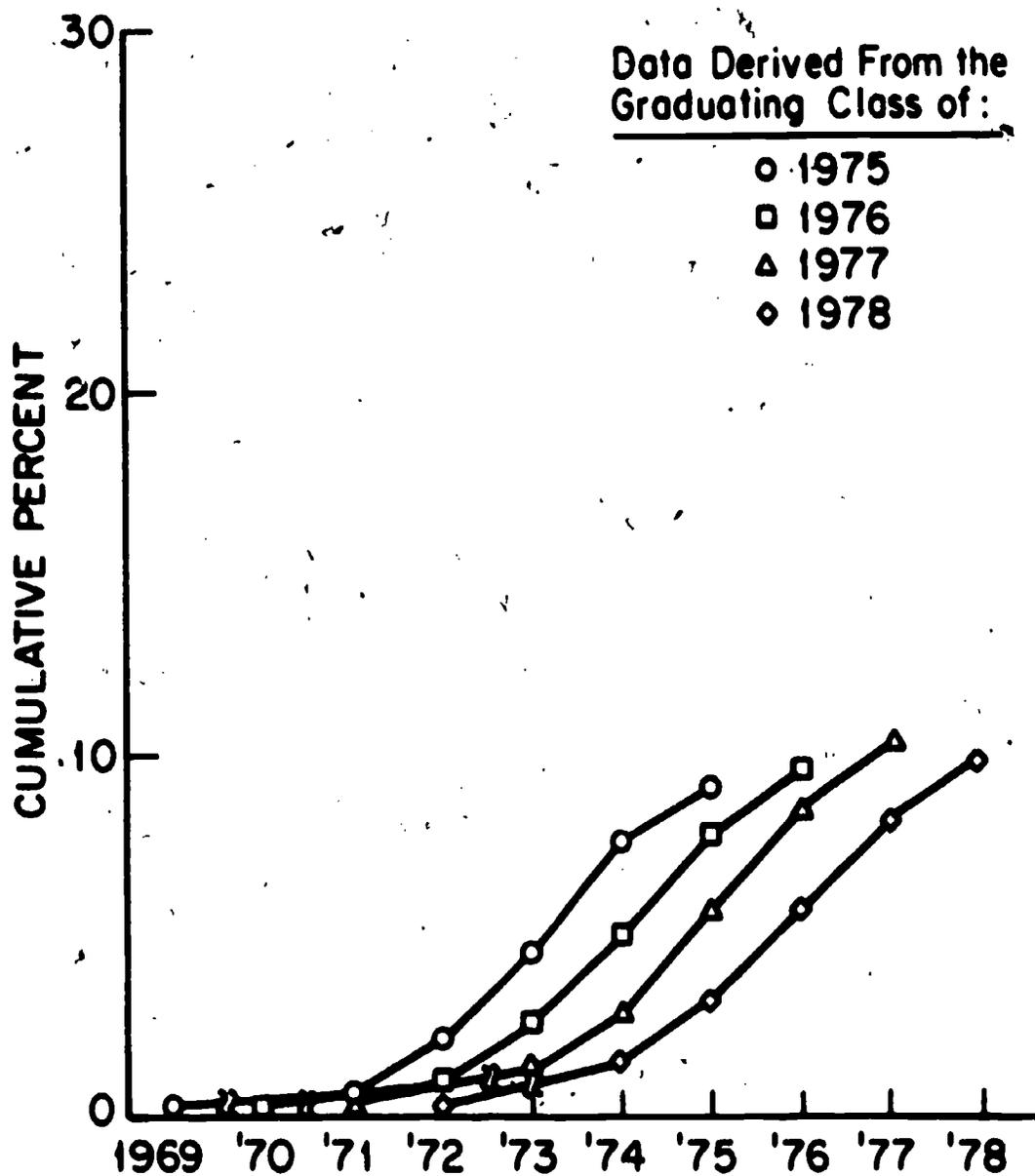
Other Opiates: Reconstructed Trends in Lifetime Prevalence for 6th Graders, 8th Graders, 9th Graders, etc.



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FIGURE 7-2

Other Opiates: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

Chapter 8

STIMULANTS

The set of questions in this study concerning stimulants asks specifically 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 and 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 1978 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 3.6% report that while they had used amphetamines under a doctor's orders, they have first 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 1978

Total Sample

- | | <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 (17.7%) have used this class of drugs during the past year, and one in eleven (8.7%) during the month preceding the survey. Of those using in the prior month, about half had used once or twice. | 3,4,6 |
| ● Use on 20 or more occasions during the past year is reported by only 2.6% of the sample. | 6 |

- Daily use (i.e., use on 20 or more occasions in the last 30 days) is reported by 0.5% of the 1978 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 prevalence intervals. To illustrate, the annual prevalence for male seniors is 16.9%, while for females it is 17.1%. However, there is a slight sex difference at heavier usage levels, with female users tending to use more frequently. (Thus, 2.3% of all males used 20-plus times during the year in contrast to 3.0% of all females.) This finding replicates the 1977 results. 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 14% for the former group in contrast to 20% for the latter. Frequent stimulant use is particularly concentrated among the noncollege-bound; 6.4% of them report use on 10 or more occasions during the year contrasted with 3.3% of the college-bound. This difference is significant at the $p < .001$ level. 2,3,4,5
- Region of the Country. There are certain modest regional differences in the prevalence of amphetamine use (for all three prevalence intervals) which have been replicated consistently in the study. The South shows a below-average rate (for example, 14.0% annual prevalence in 1978), while North Central exhibits an above-average rate (18.2% annual prevalence in 1978). 2,3,4,5
- Population Density. There is very little difference in stimulant use in 1978 among the three levels of population density being examined. 2,3,4,5

Recent Trends in Prevalence

Total Sample

- Between 1975 and 1978 the observed prevalence of amphetamine use for all three prevalence intervals (lifetime, 12 months, and 30 days) has been extremely stable overall. 2,3,4
- 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 0.5%, 0.4%, 0.5% and 0.5% in 1975 through 1978, respectively. 6

Subgroup Differences in Trends

- There is evidence this year of a move toward convergence between the college-bound and the noncollege-bound, with annual prevalence increasing 2.2% ($p < .01$) to 14% for the college-bound, while decreasing slightly (0.5%, n.s.) to 20% for the noncollege-bound. Since this is not an extension of any earlier trend, however, this pattern of convergence may simply reflect sampling error. Therefore, another year's data are needed before much importance should be attached to this finding. 2,3,4
- For the most part regional changes have been small and erratic. Over the past two years (1976-1978), however, there has been a small but consistent increase in stimulant use in the Northeast. Between 1977 and 1978, the increase was a bit more pronounced (2.8% in annual prevalence, for example, $p < .05$). 2,3,4
- The most interesting subgroup changes have been related to urbanicity or population density. Over the first three surveys there was some shifting in the relationship between urbanicity and amphetamine use. In 1975, the more urban the area, the higher the prevalence of amphetamine use. By 1977, however, the observed prevalence had dropped in the Large SMSAs (from 19.6% annual prevalence in 1975 to 15.3% in 1977) while it had risen slightly in the Other SMSAs and the Non-SMSAs. Between 1977 and 1978, however, the largest increases occurred in the Large SMSAs. For example, the increase in annual prevalence (2.4%) is significant at the $p < .05$ level. Despite this increase, however, the net effect across the three-year span from 1975 to 1978 has been to eliminate the positive relationship between urbanicity and amphetamine use. 2,3,4,5

Use at Earlier Grade Levels

- While 23% of the Class of 1978 report some use of amphetamines by the end of their senior year, only 2% tried them prior to ninth grade. Initial use was concentrated in ninth, tenth, and eleventh grades. This has been true in each of the last four graduating classes, as is reflected by the high degree of similarity of the four cohort trend lines in Figure 2. 8
- Even though the proportion who had tried amphetamines by the end of senior year has remained virtually unchanged, prevalence rates in the lower grade levels had been going up during the early seventies—the period for which we reconstruct prevalence estimates. (See Figure 1 for the prevalence rates for lower grade levels based on retrospective data from the four graduating classes.) Fig 1

- Subgroup differences in early onset for the most part parallel the differences observable at twelfth grade. That is, there is little in the way of sex differences or urbanicity differences; and the noncollege-bound show higher rates of early prevalence. Interestingly, while the West has not shown an unusual level of prevalence among twelfth graders, it has had the highest rate of early prevalence in three of the last four graduating classes. Put another way, no more youngsters in the West become involved with amphetamines, but those who do so seem to start at an earlier age on the average.

8,9

Probability of Future Use

- About 7% of 1978 seniors say they "probably" or "definitely" will be using stimulants five years in the future.
- The comparable proportions from 1975 through 1977 are about the same.

6

6

Degree and Duration of Highs

- Questions regarding the degree and duration of the highs usually experienced with amphetamine use were asked (in one form only) of respondents indicating they had used amphetamines in the previous twelve months without medical orders.
- Most say they only get "moderately high" (40%) or "a little high" (26%) when using amphetamines. A fair number (15%) say that they "don't take them to get high."
- There is little evidence of any consistent trend in the degree of high experienced with amphetamine use, although there may be some increase in the proportion of users who are not taking them to get high.
- The most commonly reported interval for staying high on amphetamines is 3 to 6 hours, reported by 40% of the users. Another 27% say they usually stay high from 7 to 24 hours.
- There is some evidence of a decrease between 1975 and 1978 in the average duration of the highs being experienced by amphetamine users.

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TABLE 8-1

Stimulants: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	22.9	8.7	8.4	5.8	77.1
Sex:						
Male	8200	22.3	8.6	8.3	5.4	77.7
Female	9000	23.2	8.6	8.5	6.1	76.8
College Plans:						
None or under 4 yrs	7500	26.7	10.6	9.4	6.7	73.3
Complete 4 yrs	8900	18.4	6.5	7.2	4.7	81.6
Region:						
Northeast	4600	25.5	10.7	8.9	5.9	74.5
North Central	5400	24.2	9.6	8.6	6.0	75.8
South	5000	19.1	6.9	7.1	5.1	80.9
West	2800	24.7	7.7	10.1	6.9	75.3
Population Density:						
Large SMSA	5500	23.5	8.9	8.8	5.8	76.5
Other SMSA	8100	23.4	9.0	8.5	5.9	75.6
Non-SMSA	4200	21.6	8.3	7.7	5.6	78.4

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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	22.3	22.6	23.0	22.9	-0.1	
Sex:							
Male	8200	20.4	22.3	22.0	22.3	+0.3	
Female	9000	23.7	22.7	23.7	23.2	-0.5	
College Plans:							
None or under 4 yrs	7500	NA	27.0	27.8	26.7	-1.1	
Complete 4 yrs	8900	NA	17.7	17.5	18.4	+0.9	
Region:							
Northeast	4600	22.8	21.9	23.8	25.5	+1.7	
North Central	5400	24.2	23.8	25.6	24.2	-1.4	
South	5000	18.3	20.2	19.5	19.1	-0.4	
West	2800	26.1	26.2	23.5	24.7	+1.2	
Population Density:							
Large SMSA	5500	26.2	23.2	22.5	23.5	+1.0	
Other SMSA	8100	22.2	23.3	24.7	23.4	-1.3	
Non-SMSA	4200	19.9	21.5	21.2	21.6	+0.4	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	16.2	15.8	16.3	17.1	+0.8	
Sex:							
Male	8200	15.6	15.8	16.0	16.9	+0.9	
Female	9000	16.5	15.4	16.4	17.1	+0.7	
College Plans:							
None or under 4 yrs	7500	NA	19.3	20.5	20.0	-0.5	
Complete 4 yrs	8900	NA	11.9	11.5	13.7	+2.2 _{ss}	
Region:							
Northeast	4600	16.5	14.7	16.8	19.6	+2.8 _s	
North Central	5400	18.7	17.8	19.0	18.2	-0.8	
South	5000	12.6	13.7	13.2	14.0	+0.8	
West	2800	18.5	17.2	16.0	17.8	+1.8	
Population Density:							
Large SMSA	5500	19.6	15.4	15.3	17.7	+2.4 _s	
Other SMSA	8100	15.5	16.3	17.1	17.5	+0.4	
Non-SMSA	4200	14.8	15.4	15.9	16.0	+0.1	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>				<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	
All seniors	17800	8.5	7.7	8.8	8.7	-0.1
Sex:						
Male	8200	8.2	7.8	8.5	8.6	+0.1
Female	9000	8.5	7.6	9.0	8.6	-0.4
College Plans:						
None or under 4 yrs	7500	NA	9.6	11.4	10.6	-0.8
Complete 4 yrs	8900	NA	5.7	5.7	6.5	+0.8
Region:						
Northeast	4600	8.8	7.0	9.6	10.7	+1.1
North Central	5400	10.9	9.7	10.4	9.6	-0.8
South	5000	6.1	6.3	7.0	6.9	-0.1
West	2800	8.2	7.8	7.6	7.8	+0.2
Population Density:						
Large SMSA	5500	11.0	7.7	8.3	8.9	+0.6
Other SMSA	8100	7.8	7.8	8.7	9.0	+0.3
Non-SMSA	4200	7.7	7.8	9.2	8.3	-0.9

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	82.9	6.5	3.4	2.3	2.2	1.3	1.3
Sex:								
Male	8200	83.1	6.3	3.7	2.5	2.2	1.2	1.1
Female	9000	82.9	6.6	3.2	2.1	2.2	1.5	1.5
College Plans:								
None or under 4 yrs	7500	80.0	7.1	3.8	2.7	3.0	1.8	1.6
Complete 4 yrs	8900	86.3	5.7	3.1	1.7	1.4	0.8	1.1
Region:								
Northeast	4600	80.4	6.6	3.9	3.0	2.7	1.8	1.6
North Central	5400	81.8	6.4	3.3	2.2	3.0	1.7	1.6
South	5000	86.0	5.9	3.3	1.8	1.3	0.8	0.9
West	2800	82.2	7.9	2.9	2.4	1.9	1.1	1.5
Population Density:								
Large SMSA	5500	82.3	6.8	3.5	2.3	2.5	1.5	1.2
Other SMSA	8100	82.5	6.6	3.9	2.4	2.2	1.2	1.3
Non-SMSA	4200	84.0	6.1	2.6	2.2	2.0	1.5	1.5

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)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>
<u>Lifetime use</u>				
No occasions	77.7	77.4	77.0	77.1
1-2 occasions	6.7	7.1	7.0	7.1
3-5 occasions	3.4	3.8	3.8	4.1
6-9 occasions	2.4	2.8	2.8	2.8
10-19 occasions	3.3	3.2	3.1	3.0
20-39 occasions	2.3	2.0	2.4	2.4
40 or more	4.2	3.8	3.9	3.5
	N = (9694)	(15891)	(17673)	(18161)
<u>Use in last twelve months</u>				
No occasions	83.8	84.2	83.7	82.9
1-2 occasions	5.5	5.7	5.7	6.5
3-5 occasions	2.8	2.9	3.2	3.4
6-9 occasions	2.4	2.3	2.3	2.3
10-19 occasions	2.4	2.2	2.5	2.2
20-39 occasions	1.6	1.3	1.5	1.3
40 or more	1.5	1.4	1.2	1.3
	N = (9671)	(15853)	(17632)	(18122)
<u>Use in last thirty days</u>				
No occasions	91.5	92.3	91.2	91.3
1-2 occasions	4.1	3.9	4.3	4.3
3-5 occasions	1.7	1.6	1.9	1.9
6-9 occasions	1.1	1.0	1.3	1.2
10-19 occasions	1.1	0.7	0.8	0.8
20-39 occasions	0.3	0.3	0.3	0.3
40 or more	0.2	0.1	0.2	0.2
	N = (9660)	(15856)	(17624)	(18107)
<u>Probability of future use</u>				
Definitely will not	74.4	72.3	71.2	71.7
Probably will not	19.2	21.5	22.2	21.6
Probably will	5.4	5.4	5.5	5.9
Definitely will	1.1	0.8	1.1	0.8
	N = (2975)	(3050)	(3469)	(3483)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.1	0.3	0.1	0.1
Seventh or Eighth grade	1.0	1.5	2.0	1.9
Ninth grade	4.3	4.4	5.1	5.2
Tenth grade	5.8	7.1	7.3	6.1
Eleventh grade	7.4	6.2	5.5	6.0
Twelfth grade	3.7	3.2	3.0	3.4
Never used	77.7	77.4	77.0	77.1
	N ^a = (2936)	(2871)	(5836)	(5865)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 8-8

Stimulants: Grade in Which First Used by Subgroups, Class of 1978

(Entries are percentages which sum horizontally)

	Number of Cases	Grade in/school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.1	1.9	5.2	6.1	6.0	3.4	77.1
Sex:								
Male	2800	0.3	1.6	4.8	5.7	6.3	3.5	77.7
Female	3100	0.0	2.1	5.5	6.5	5.6	3.5	76.8
College Plans:								
None or under 4 yrs	2500	0.2	2.7	6.2	7.5	6.6	3.5	73.3
Complete 4 yrs	3100	0.1	1.3	3.8	4.5	5.2	3.5	81.6
Region:								
Northeast	1400	0.1	2.0	5.4	8.0	6.7	3.3	74.5
North Central	2000	0.1	1.9	5.4	6.2	6.6	4.0	75.8
South	1600	0.3	1.4	3.7	5.1	5.6	3.0	80.9
West	1000	0.0	2.5	7.9	5.7	4.5	4.0	75.3
Population Density:								
Large SMSA	1800	0.1	1.3	4.6	7.5	6.4	3.6	76.5
Other SMSA	2800	0.1	3.0	5.5	6.1	5.5	3.0	76.6
Non-SMSA	1400	0.3	0.8	5.2	5.0	6.3	4.1	78.4

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	5.4	6.2	7.2	7.2	0.0	
Sex:							
Male	2800	4.9	5.4	6.6	6.7	+0.1	
Female	3100	5.5	6.7	7.7	7.6	-0.1	
College Plans:							
None or under 4 yrs	2500	NA	7.2	8.5	9.1	+0.6	
Complete 4 yrs	3100	NA	4.5	5.1	5.2	+0.1	
Region:							
Northeast	1400	4.4	6.1	8.0	7.5	-0.5	
North Central	2000	5.5	6.2	6.9	7.4	+0.5	
South	1600	4.1	4.8	7.0	5.4	-1.6	
West	1000	9.1	9.7	8.0	10.4	+2.4	
Population Density:							
Large SMSA	1800	6.7	7.1	7.8	6.0	-1.8 ^s	
Other SMSA	2800	6.4	7.9	8.0	8.6	+0.6	
Non-SMSA	1400	3.2	3.5	5.6	6.3	+0.7	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 8-10

Amphetamines: Trends in Degree and Duration of Feeling High

Q. <i>When you take amphetamines how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS: ^a				
I don't take them to get high	9.3	10.7	15.1	14.7
Not at all high	4.6	5.0	7.5	6.2
A little high	26.4	26.1	24.0	25.9
Moderately high	44.6	43.8	39.2	40.2
Very high	15.1	14.4	14.1	13.0
	N = (410)	(447)	(523)	(542)
PERCENT OF ALL RESPONDENTS				
Did not use in last 12 months	83.8	84.2	83.7	82.9
I don't take them to get high	1.5	1.7	2.5	2.5
Not at all high	0.7	0.8	1.2	1.1
A little high	4.3	4.1	3.9	4.4
Moderately high	7.2	6.9	6.4	6.9
Very high	2.4	2.3	2.3	2.2
	N = (2531)	(2829)	(3209)	(3170)
Q. <i>When you take amphetamines how long do you usually stay high?</i>				
PERCENT OF RECENT USERS: ^a				
Usually don't get high	10.7	11.2	11.9	14.5
One to two hours	11.4	12.1	15.3	17.0
Three to six hours	37.0	48.4	38.4	39.5
Seven to 24 hours	37.0	26.1	31.6	27.1
More than 24 hours	3.8	2.1	2.9	1.9
	N = (412)	(455)	(519)	(546)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	83.8	84.2	83.7	82.9
Usually don't get high	1.7	1.8	1.9	2.5
One to two hours	1.8	1.9	2.5	2.9
Three to six hours	6.0	7.6	6.3	6.7
Seven to 24 hours	6.0	4.1	5.1	4.6
More than 24 hours	0.6	0.3	0.5	0.3
	N = (2543)	(2880)	(3184)	(3193)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 8-1

Stimulants: Reconstructed Trends in Lifetime Prevalence for 6th Graders, 8th Graders, 9th Graders, etc.

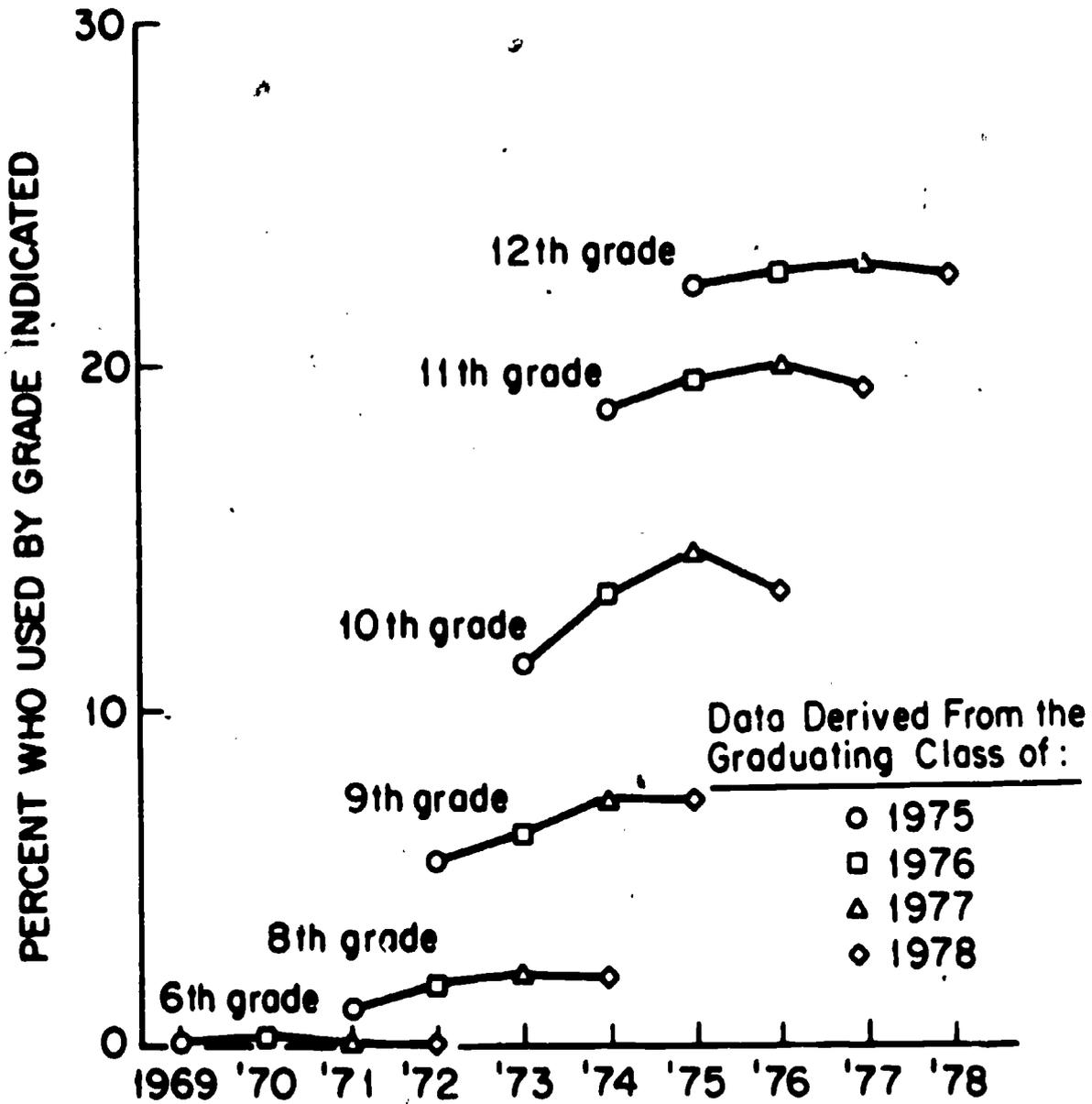
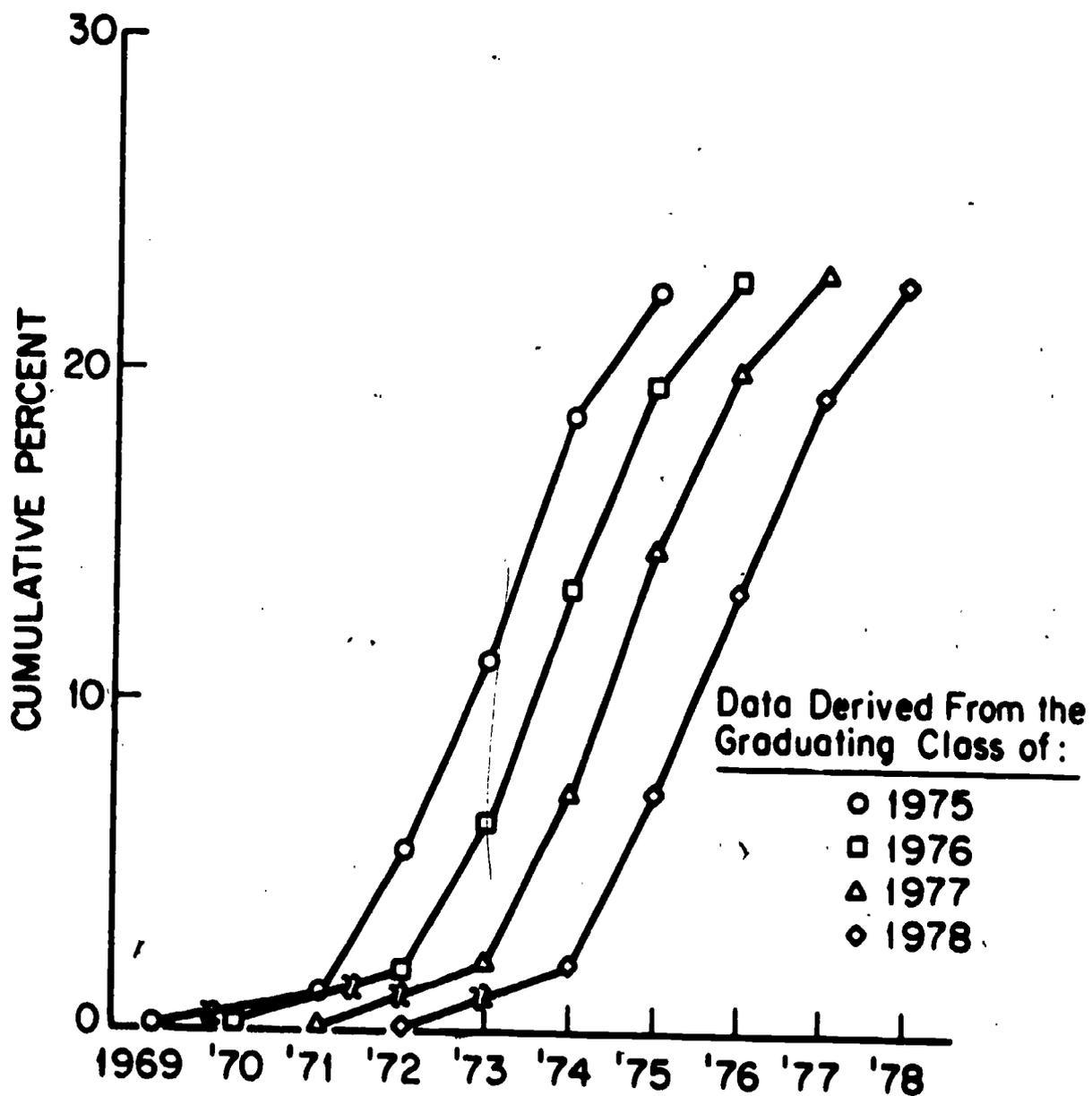


FIGURE 8-2

Stimulants: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

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 13.7% of the 1978 sample, while the addition of methaqualone increases the total number ever having used "sedatives" to only 16.0% 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 1978, 12.3% answered "yes," which broke down to 9.5% whose first use was under a doctor's orders and another 2.7% who had previously used barbiturates on their own before having them prescribed by a doctor.

Prevalence of Use in 1978

Total Sample

Table(s)

- Roughly one in every six seniors (16.0%) reports trying sedatives by the end of senior year. Roughly a third of those have used only once or twice. 2,6
- One in ten (9.9%) has used sedatives in the last year and one in 25 (4.2%) has used in the last month without medical instructions. 3,4
- Of those using in the preceding month, about half used only once or twice. At the other extreme, the proportion of the sample reporting use on a daily or near daily basis is 0.2% (or about 36 respondents). 6

Subgroup DifferencesTable(s)

- Sex Differences. Male seniors in high school report slightly more sedative use without medical supervision than do female seniors. To illustrate, the annual prevalence for males was 11% in 1978 vs. 9% for females. Males also report a higher level of frequent use. 2,3,4,5
- College Plans. Those not planning four years of college use sedatives illicitly more often than do those with such plans. Annual prevalence is about 11% and 9%, respectively. 2,3,4,5
- Region of the Country. The West shows a slightly lower-than-average prevalence of sedative use for all three prevalence intervals (for example, 8.4% for the last year vs. 9.9% for the entire sample). 2,3,4,5
- Population Density. Comparisons of three levels of urbanicity indicate relatively small and inconsistent differences in prevalence across the four different senior classes, the non-metropolitan areas having slightly less sedative use than either class of metropolitan area. 2,3,4,5

Recent Trends in PrevalenceTotal Sample

- There has been a moderate, though uneven decline in sedative prevalence rates among seniors over the last three years. Between 1975 and 1978, reported lifetime prevalence dropped from 18.2% to 16.0%, reported annual prevalence from 11.7% to 9.9%, and reported monthly prevalence from 5.4% to 4.2%. 2,3,4

Subgroup Differences in Trends

- There has been a slightly different pattern of decline for males and females in their sedative use over the last three years. Prevalence among females has declined steadily from year to year, with lifetime prevalence dropping about 1% each year. However, the lifetime prevalence rates for males remained quite steady until this year, when it dropped for the first time. 2,3,4
- No clear trends can be derived from the prevalence figures for most regions of the country, the North Central region being the exception. The annual prevalence estimate for the North Central has dropped from about 13% in 1975 to 9% in 1978, a change which is nearly significant at the .001 level. 2,3,4

Use at Earlier Grade Levels

- Although 16% of seniors used sedatives without medical supervision by the end of senior year, only about 2% used prior to ninth grade. Most eventual users started in ninth, tenth, or eleventh grade, as was the case for amphetamines. 7
- Differences in the age of onset for each of the last four graduating classes may be observed in Figure 2. Each class shows a steep S shaped curve, as was true for amphetamines; however, in contrast to amphetamines, the curves for sedatives have been getting succeedingly less steep. Fig 2
- Interestingly, the four cohorts being followed here showed successively higher sedative prevalence rates at younger age levels but by later ages, each successive cohort reported having had less total experience with sedatives. Fig 2
- Figure 1 presents the same data as Figure 2, but uses lines to connect the same grade levels (across cohorts) rather than the same cohort (across grade levels). It helps to show that the cohort lines in Figure 2 may be reflecting a shifting secular trend or period effect (i.e., one common to all ages). Prior to about 1975, the prevalence rates in most grade levels were rising. However, after 1975 prevalence rates in all grade levels on which we have data were declining, indicating that sedative use probably peaked at all grade levels in 1975. Fig 1
- The subgroup differences in early use do not entirely parallel the subgroup differences which exist by the end of twelfth grade. The closest parallel occurs in relation to college plans: the college-bound report lower prevalence in twelfth grade and also report less sedative use in the earlier grades than the noncollege-bound. However, there is virtually no sex difference in use prior to the tenth grade, even though males have higher usage rates by twelfth grade; and the Northeast is not unusually high in early onset, although it has the highest current prevalence rates. And, students in the West in the Class of 1978 show the highest rate of early use even though they have the lowest prevalence rates by twelfth grade. This precocity among users of sedatives in the West parallels the findings for stimulants presented in the previous chapter and is for the most part replicated across graduating classes. A shifting secular trend of the type just discussed—that is, a period of increasing popularity followed by a period of decreasing popularity—could explain these unusual findings in the West. If one makes the not unreasonable assumption that such secular trends tend to occur earlier in the West, then for any given grade level prevalence would have been higher in the West in the earlier years (because the upward secular trend occurred there first) but lower in the West in the later years (because the downward secular trend was occurring there first). The data on early use and twelfth grade use of sedatives, as well as stimulants, fit with this explanation fairly well. 8,9

Probability of Future Use

- Only 3.5% of seniors in 1978 say they "probably" or "definitely" will be using sedatives five years in the future. 6
- That represents a return to 1975-1976 levels after a small, nonsignificant increase in 1977. 6

Degree and Duration of Highs

- People who without medical orders used either of two classes of sedatives, barbiturates, or methaqualone, were asked separately about the intensity and duration of the highs they experienced with each type of drug. Therefore, two sets of answers are presented (in Tables 10 and 11) and discussed separately.
- Students who used any barbiturates during the year prior to the survey report about the same intensity of highs as reported by users of amphetamines, discussed earlier. The modal answer is "moderately high," given by 42% of the users. About 13% say they do not take them to get high. 10
- The modal duration of barbiturate highs is 3 to 6 hours, reported by 52% of users in 1978. 10
- There has been no consistent trend across years in the intensity or duration of the highs reported by barbiturate users. 10
- Use of methaqualone (quaaludes) involves, on the average, more intense and longer highs. About half (49%) of the quaalude users say they usually get "very high," (vs. 19% for barbiturates) while another third (32%) get "moderately high." 11
- A substantial one-third of the quaalude users (vs. 13% of the barbiturate users) say they stay high 7 to 24 hours on these drugs, while another 50% say they stay high 3 to 6 hours. 11
- While there does not appear to be any directional trend across years in the intensity of highs experienced by quaalude users, there appears to be a slight upward trend in the duration of the highs. 11

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TABLE 9-1

Sedatives: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	16.0	4.2	5.7	6.1	84.0
Sex:						
Male	8200	16.9	4.6	6.0	6.3	83.1
Female	9000	14.8	3.6	5.4	5.8	85.2
College Plans:						
None or under 4 yrs	7500	18.1	4.6	6.2	7.3	81.9
Complete 4 yrs	8900	13.1	3.3	5.2	4.6	86.9
Region:						
Northeast	4600	18.1	5.5	6.2	6.4	81.9
North Central	5400	15.2	3.5	5.7	6.0	84.8
South	5000	15.7	4.3	5.6	5.8	84.3
West	2800	14.7	2.9	5.5	6.3	85.3
Population Density:						
Large SMSA	5500	16.7	4.3	5.9	6.5	83.3
Other SMSA	8100	16.6	4.3	6.0	6.3	83.4
Non-SMSA	4200	14.6	3.9	5.2	5.5	85.4

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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	18.2	17.7	17.4	16.0	-1.4	
Sex:							
Male	8200	18.1	18.0	18.3	16.9	-1.4	
Female	9000	18.2	17.1	16.3	14.8	-1.5	
College Plans:							
None or under 4 yrs	7500	NA	20.5	20.7	18.1	-2.6 ^{ss}	
Complete 4 yrs	8900	NA	14.2	13.5	13.1	-0.4	
Region:							
Northeast	4600	18.4	18.8	17.4	18.1	+0.7	
North Central	5400	19.1	17.6	18.6	15.2	-3.4 ^s	
South	5000	17.2	18.3	17.8	15.7	-2.1	
West	2800	17.8	15.0	13.8	14.7	+0.9	
Population Density:							
Large SMSA	5500	19.8	18.6	16.8	16.7	-0.1	
Other SMSA	8100	18.4	17.9	18.5	16.6	-1.9	
Non-SMSA	4200	16.8	16.7	16.5	14.6	-1.9	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	11.7	10.7	10.8	9.9	-0.9	
Sex:							
Male	8200	12.9	11.4	12.0	10.6	-1.4 s	
Female	9000	10.6	9.9	9.4	9.0	-0.4	
College Plans:							
None or under 4 yrs	7500	NA	12.7	12.9	10.8	-2.1 ss	
Complete 4 yrs	8900	NA	8.3	8.1	8.5	+0.4	
Region:							
Northeast	4600	10.9	11.5	10.7	11.7	+1.0	
North Central	5400	13.4	11.4	11.9	9.2	-2.7 ss	
South	5000	11.1	11.1	11.3	9.9	-1.4	
West	2800	10.4	7.3	7.5	8.4	+0.9	
Population Density:							
Large SMSA	5500	12.3	11.4	9.8	10.2	+0.4	
Other SMSA	8100	12.1	10.8	11.7	10.3	-1.4	
Non-SMSA	4200	10.7	10.1	10.3	9.1	-1.2	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>					'77-'78 <i>change</i>
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	5.4	4.5	5.1	4.2	-0.9 <i>ss</i>	
Sex:							
Male	8200	5.7	4.5	5.7	4.6	-1.1 <i>s</i>	
Female	9000	5.1	4.3	4.4	3.6	-1.1 <i>s</i>	
College Plans:							
None or under 4 yrs	7500	NA	5.6	6.2	4.6	-1.6 <i>ss</i>	
Complete 4 yrs	8900	NA	3.2	3.6	3.3	-0.3	
Region:							
Northeast	4600	4.6	4.2	5.0	5.5	+0.5	
North Central	5400	6.4	5.3	5.6	3.5	-2.1 <i>sss</i>	
South	5000	5.3	4.8	5.6	4.3	-1.3 <i>s</i>	
West	2800	4.6	2.7	3.3	2.9	-0.4	
Population Density:							
Large SMSA	5500	5.7	4.3	4.9	4.3	-0.6	
Other SMSA	8100	5.6	4.6	5.8	4.3	-1.5 <i>ss</i>	
Non-SMSA	4200	4.9	4.6	4.5	3.9	-0.6	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	90.1	3.9	2.6	1.2	1.2	0.4	0.6
Sex:								
Male	8200	89.4	4.0	2.8	1.5	1.3	0.4	0.6
Female	9000	91.0	3.8	2.5	0.9	1.1	0.3	0.5
College Plans:								
None or under 4 yrs	7500	89.2	4.3	2.8	1.3	1.3	0.5	0.8
Complete 4 yrs	8900	91.5	3.5	2.5	1.0	1.0	0.3	0.3
Region:								
Northeast	4600	88.3	4.4	3.2	1.4	1.7	0.4	0.5
North Central	5400	90.8	4.0	2.4	1.0	0.9	0.4	0.6
South	5000	90.1	3.7	2.5	1.4	1.2	0.4	0.7
West	2800	91.6	3.5	2.4	1.0	0.8	0.3	0.4
Population Density:								
Large SMSA	5500	89.8	4.2	2.8	1.3	1.3	0.3	0.3
Other SMSA	8100	89.7	4.0	2.9	1.2	1.3	0.4	0.5
Non-SMSA	4200	90.9	3.6	2.2	1.2	0.9	0.5	0.8

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

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	81.8	82.3	82.6	84.0
1-2 occasions	5.7	6.2	5.9	5.4
3-5 occasions	4.2	3.8	3.6	3.9
6-9 occasions	1.8	2.0	1.9	1.7
10-19 occasions	2.4	2.4	2.5	2.1
20-39 occasions	1.2	1.1	1.2	1.5
40 or more	2.8	2.2	2.4	1.8
	N = (9675)	(15995)	(17762)	(18269)
<u>Use in last twelve months</u>				
No occasions	88.3	89.3	89.2	90.1
1-2 occasions	4.2	4.3	4.0	3.9
3-5 occasions	3.0	2.7	2.5	2.6
6-9 occasions	1.4	1.2	1.4	1.2
10-19 occasions	1.7	1.5	1.7	1.2
20-39 occasions	0.6	0.5	0.6	0.4
40 or more	0.8	0.5	0.7	0.6
	N = (9671)	(15980)	(17752)	(18267)
<u>Use in last thirty days</u>				
No occasions	94.6	95.5	94.9	95.8
1-2 occasions	2.6	2.3	2.4	2.2
3-5 occasions	1.4	1.2	1.5	1.0
6-9 occasions	0.6	0.5	0.5	0.4
10-19 occasions	0.5	0.3	0.5	0.4
20-39 occasions	0.2	0.1	0.1	0.1
40 or more	0.1	0.1	0.1	0.1
	N = (9666)	(15980)	(17748)	(18265)
<u>Probability of future use^a</u>				
Definitely will not	77.3	77.1	75.2	75.7
Probably will not	19.0	19.2	20.3	20.8
Probably will	3.1	3.1	4.0	2.9
Definitely will	0.6	0.5	0.6	0.6
	N = (2893)	(3055)	(3443)	(3481)

^aThis 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>	<u>Class of 1978</u>
Sixth grade (or below)	0.1	0.4	0.3	0.3
Seventh or Eighth grade	1.0	0.8	1.8	1.9
Ninth grade	3.0	3.7	3.9	3.5
Tenth grade	5.9	5.7	5.3	4.3
Eleventh grade	5.1	5.1	4.1	3.8
Twelfth grade	3.0	1.9	2.0	2.2
Never used	81.8	82.3	82.6	84.0
	N ^a = (2822)	(2914)	(6004)	(6073)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 9-8
Sedatives: Grade in Which First Used by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.3	1.9	3.5	4.3	3.8	2.2	84.0
Sex:								
Male	2800	0.3	1.9	3.4	4.7	4.4	2.3	83.1
Female	3100	0.1	2.0	3.6	4.0	3.1	2.0	85.2
College Plans:								
None or under 4 yrs	2500	0.5	2.4	4.1	4.7	4.0	2.4	81.9
Complete 4 yrs	3100	0.1	1.5	2.8	3.3	3.3	2.0	86.9
Region:								
Northeast	1400	0.3	2.0	3.1	5.9	4.9	2.0	81.9
North Central	2000	0.2	2.0	3.3	4.1	3.5	2.3	84.8
South	1600	0.3	1.7	4.1	3.6	3.6	2.4	84.3
West	1000	0.3	2.5	4.0	3.6	2.4	1.9	85.3
Population Density:								
Large SMSA	1800	0.1	1.9	2.5	4.8	5.0	2.3	83.3
Other SMSA	2800	0.3	2.8	3.8	4.6	2.9	2.2	83.4
Non-SMSA	1400	0.5	0.8	4.0	3.2	4.0	2.2	85.4

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	4.1	4.9	6.0	5.7	-0.3	
Sex:							
Male	2800	4.4	4.3	6.6	5.6	-1.0	
Female	3100	3.7	5.5	5.5	5.7	+0.2	
College Plans:							
None or under 4 yrs	2500	NA	5.0	6.9	7.0	+0.1	
Complete 4 yrs	3100	NA	4.5	4.7	4.4	-0.3	
Region:							
Northeast	1400	5.3	6.5	6.4	5.4	-1.0	
North Central	2000	4.1	4.3	6.2	5.5	-0.7	
South	1600	3.2	4.8	6.5	6.1	-0.4	
West	1000	4.5	5.5	3.5	6.8	+3.3 ⁸⁸	
Population Density:							
Large SMSA	1800	6.2	6.1	6.2	4.5	-1.7 ⁸	
Other SMSA	2800	4.1	5.9	6.2	6.9	+0.7	
Non-SMSA	1400	2.4	3.5	5.5	5.3	-0.2	

NOTES: Level of significance of difference between the two most recent classes:

$8 = .05$, $88 = .01$, $888 = .001$.

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 9-10

Barbiturates: Trends in Degree and Duration of Feeling High

Q. <i>When you take barbiturates how high do you usually get?</i>	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
PERCENT OF RECENT USERS:^a				
I don't take them to get high	8.2	11.7	11.4	12.8
Not at all high	6.3	4.6	6.0	7.3
A little high	24.7	22.6	22.0	18.9
Moderately high	37.1	46.3	40.4	42.4
Very high	23.6	14.7	20.3	18.6
	N = (186)	(266)	(270)	(256)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	89.0	90.4	90.7	91.9
I don't take them to get high	0.9	1.1	1.1	1.0
Not at all high	0.7	0.4	0.6	0.6
A little high	2.7	2.2	2.0	1.5
Moderately high	4.1	4.4	3.8	3.4
Very high	2.6	1.4	1.9	1.5
	N = (1691)	(2771)	(2903)	(3160)
Q. <i>When you take barbiturates how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	13.1	13.8	14.1	17.4
One to two hours	20.0	26.0	21.5	17.2
Three to six hours	42.4	44.6	47.7	52.0
Seven to 24 hours	23.7	14.7	14.1	13.4
More than 24 hours	0.8	0.9	2.6	0.0
	N = (185)	(258)	(265)	(255)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	89.0	90.4	90.7	91.9
Usually don't get high	1.4	1.3	1.3	1.4
One to two hours	2.2	2.5	2.0	1.4
Three to six hours	4.7	4.3	4.4	4.2
Seven to 24 hours	2.6	1.4	1.3	1.1
More than 24 hours	0.1	0.1	0.2	0.0
	N = (1682)	(2688)	(2849)	(3148)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 9-11

Quaaludes: Trends in Degree and Duration of Feeling High

Q. <i>When you take quaaludes how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
I don't take them to get high	5.3	2.3	4.5	4.6
Not at all high	2.3	0.6	7.9	2.0
A little high	15.9	8.2	9.2	12.4
Moderately high	33.1	39.2	29.7	32.3
Very high	43.4	49.7	48.7	48.7
	N = (115)	(126)	(189)	(163)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.7	95.3	94.7	95.1
I don't take them to get high	0.3	0.1	0.2	0.2
Not at all high	0.1	0.0	0.4	0.1
A little high	0.8	0.4	0.5	0.6
Moderately high	1.8	1.8	1.6	1.6
Very high	2.3	2.3	2.6	2.4
	N = (2170)	(2681)	(3566)	(3326)
Q. <i>When you take quaaludes how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	6.3	5.2	7.2	1.3
One to two hours	18.3	15.8	14.5	14.1
Three to six hours	48.7	52.2	46.3	50.3
Seven to 24 hours	24.9	25.3	28.1	33.0
More than 24 hours	1.8	1.5	3.9	1.2
	N = (112)	(130)	(185)	(161)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	94.7	95.3	94.7	95.1
Usually don't get high	0.3	0.2	0.4	0.1
One to two hours	1.0	0.7	0.8	0.7
Three to six hours	2.6	2.5	2.5	2.5
Seven to 24 hours	1.3	1.2	1.5	1.6
More than 24 hours	0.1	0.1	0.2	0.1
	N = (2113)	(2766)	(3491)	(3286)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 9-1

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

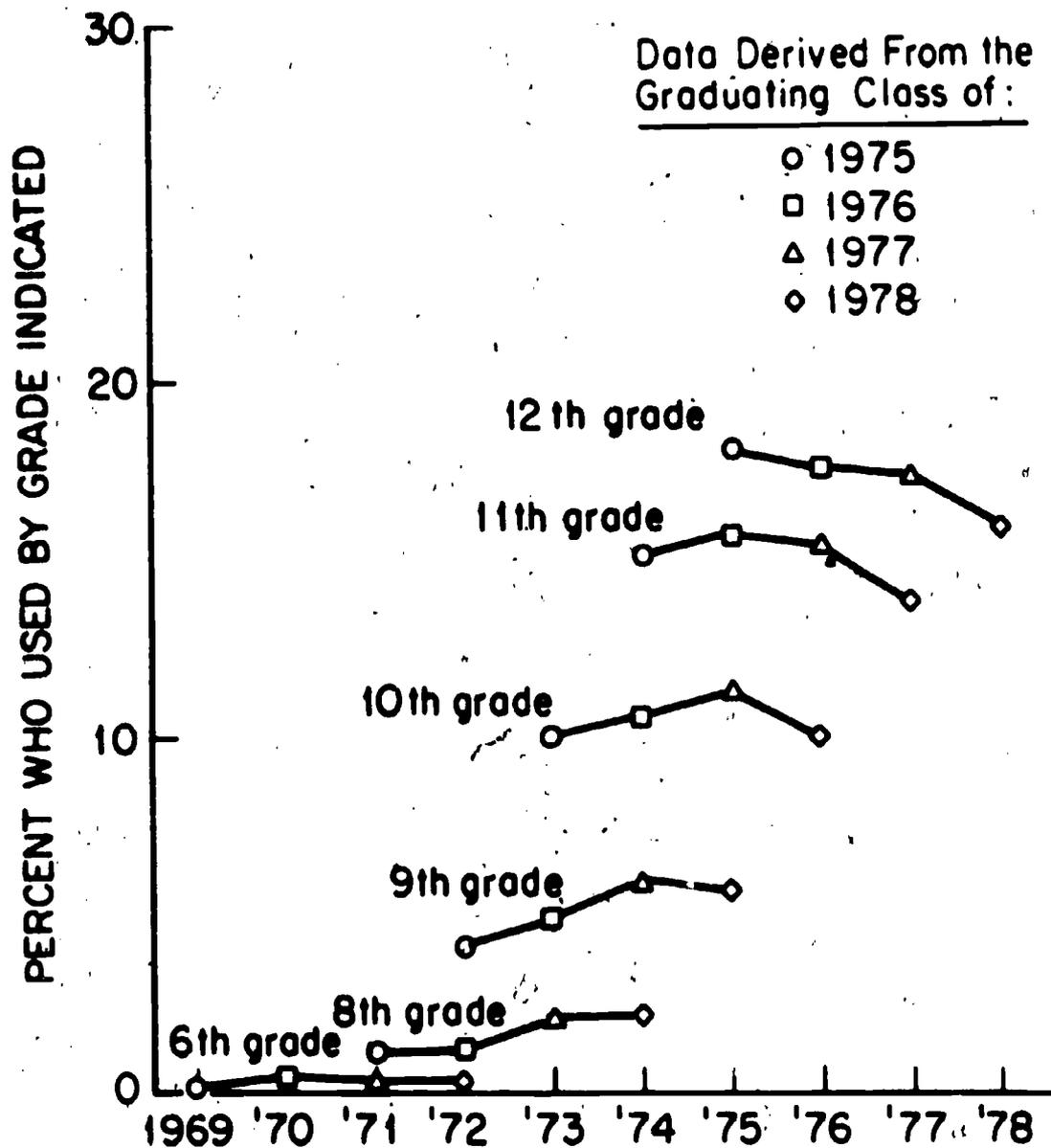
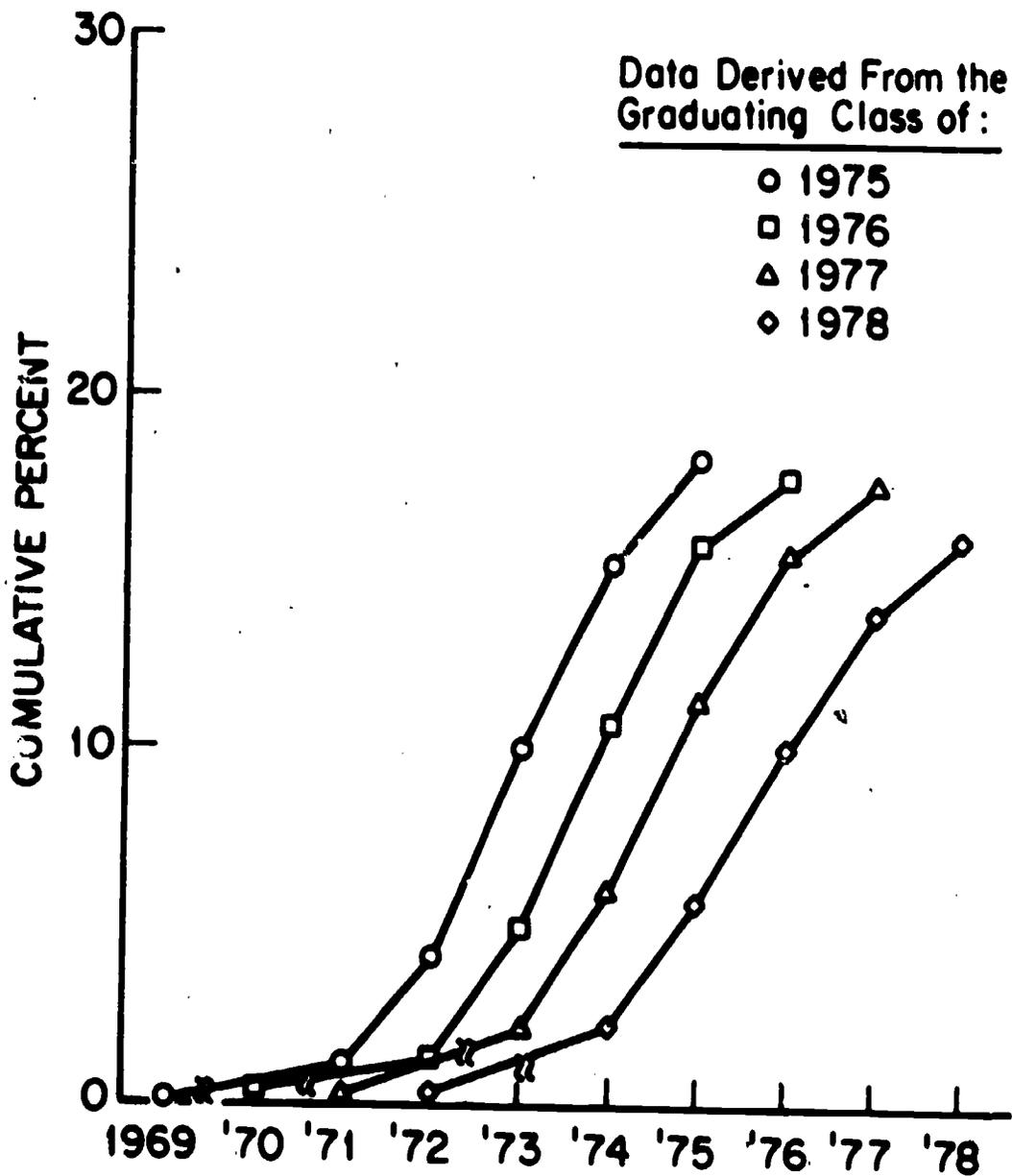


FIGURE 9-2

Sedatives: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

TRANQUILIZERS

As was the case for the other psychotherapeutic drugs, respondents were asked in the questions on tranquilizers to report only occasions on which 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, 16.5% of the class of 1978 reported previous use under medical supervision. For 13.7% it was the first time they had used tranquilizers; the remaining 2.8% reported that their initial use was on their own.

Prevalence of Use in 1978

Total Sample

- | | <u>Table(s)</u> |
|--|-----------------|
| ● More than one in every six seniors (17.0%) reports ever having used a tranquilizer without medical supervision. Slightly less than half of those have used on only one or two occasions, and thus can be considered experimenters. | 2,6 |
| ● One in ten (9.9%) reports use in the prior year and about one in 30 (3.4%) reports use in the prior month. | 3,4 |
| ● Relatively few (2.0%) have used on 20 or more occasions in their lifetime. | 6 |
| ● Practically no one reports daily or near-daily use in the prior month. | 10 |

Subgroup Differences

- | | |
|--|---------|
| ● <u>Sex Differences.</u> Females show a slightly higher prevalence of use than males on all three time intervals. These small differences, which have been replicated consistently in all four years of the study, are noteworthy only in that tranquilizers and stimulants comprise the only two classes of drugs which are more widely used among female than among male seniors. | 2,3,4,5 |
|--|---------|

Table(s)

- College Plans. Those not planning to complete four years of college report a slightly higher prevalence than those with four-year college plans. (This finding also has been replicated repeatedly in this study.) The figures for annual prevalence, for example, are 11.1% and 8.6%, respectively. Frequent use is more disproportionately concentrated among the noncollege-bound, however. Some 1.9% of them report use on 10 or more occasions in the last year, vs. 1.1% 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 PrevalenceTotal Sample

- The overall prevalence rates in 1978 are slightly lower for tranquilizers than they were in 1977. The decline is rather trivial for lifetime prevalence (from 18% to 17%) but, if true, of more consequence for 30-day prevalence (from 4.6% to 3.4%, $p < .001$). Without an additional year's data, however, it is really too early to tell whether the previous pattern of stability in tranquilizer use is yielding to a downturn. 2,3,4

Subgroup Differences in Trends

- Most subgroups have shown rather erratic patterns of change over the last three years, making interpretation precarious. Most subgroups showed declines between 1977 and 1978 for all three prevalence intervals, bolstering the interpretation that a general decline may be beginning. However, since most subgroups had shown an increase over the previous year (1976-1977), there is also the possibility that sampling error accounts for the change. 2,3,4
- Over the years, usage rates for males and females have pretty much moved in parallel. This has also been true for the college-bound and noncollege-bound. 2,3,4

Use at Earlier Grade Levels

- Of the 17% of seniors who have used tranquilizers without medical supervision, the great majority initially did so in ninth, tenth, or eleventh grade (as was true for stimulants and sedatives). 7

Table(s)

- Each of the last four graduating classes has shown a very similar pattern of onset with age, the only difference being that there has been a slight shift toward starting earlier. (Recall that progressively earlier onset was also observed for stimulants and sedatives.) Fig 2
- As a result of this shift, prevalence rates at lower grade levels were going up during the early seventies—the period for which we can reconstruct prevalence estimates using the retrospective data from these four graduating classes.* Fig 1
- In the Class of 1978 early onset is higher among females than males and among the noncollege-bound than among the college-bound. Students from the West in the Class of 1978 show an unusually high prevalence of early tranquilizer use (10% before the tenth grade), even though their level of use by twelfth grade is below average. This anomalous finding parallels similar differences for the West reported in the previous two chapters, on stimulants and sedatives, and discussed at greater length in Chapter 9. 8,9
- The increase in early onset observed across the four graduating classes taken altogether is reflected in nearly all of the subgroup data. The rise has been substantially larger than average, however, among females, the noncollege-bound, and students in the West. As a result, there was greater subgroup differentiation among tenth graders in 1976 than there had been in 1973 in terms of their tranquilizer use. 9

Probability of Future Use

- About 4% of 1978 seniors say they "probably" or "definitely" will be using tranquilizers five years in the future, while 67% say they "definitely" will not. 6
- The percentage of seniors who say they definitely will not use tranquilizers in the future has dropped consistently from 71% in 1975 to 67% in 1978. 6

Degree and Duration of Highs

- Seniors reporting any use of tranquilizers during the prior twelve months without medical orders were asked to describe the degree and duration of the highs they experienced.
- Nearly one out of every four such users (23%) say they do not use tranquilizers to get high, and another 14% say they usually do not get high when using them. Most of the remaining users say they used them only to get "a little high" 10

*Note that these grade-level prevalence estimates are based only on the 80-85% of each age cohort who remain in school through the end of twelfth grade.

Table(s)

(27%) or "moderately high" (29%). Thus, of all of the drug classes discussed in this volume (except cigarettes), tranquilizers are used the least for attaining a sense of euphoria or inebriation.

- Of those who get high with tranquilizers, the great majority state that they usually stay high less than 7 hours, and many (26% of all users) stay high only 1 or 2 hours. 10
- There appears to be a cross-time trend for users of tranquilizers to report slightly less intense (or no) highs on these drugs and to report a slightly shorter duration to their usual highs. 10

TABLE 10-1

Tranquillizers: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	17.0	3.4	6.5	7.1	83.0
Sex:						
Male	8200	16.4	3.2	6.5	6.7	83.6
Female	9000	17.6	3.7	6.4	7.5	82.4
College Plans:						
None or under 4 yrs	7500	19.5	4.1	7.0	8.4	80.5
Complete 4 yrs	8900	14.6	2.8	5.8	6.0	85.4
Region:						
Northeast	4600	18.3	4.2	6.8	7.3	81.7
North Central	5400	15.4	3.0	5.8	6.6	84.6
South	5000	17.5	3.5	7.0	7.0	82.5
West	2800	17.3	3.0	5.9	8.4	82.7
Population Density:						
Large SMSA	5500	17.5	3.6	6.7	7.2	82.5
Other SMSA	8100	18.0	3.5	6.6	7.9	82.0
Non-SMSA	4200	15.3	3.2	6.0	6.1	84.7

NOTE: 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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	17.0	16.8	18.0	17.0	-1.0	
Sex:							
Male	8200	15.7	15.5	16.5	16.4	+0.1	
Female	9000	18.1	18.0	19.5	17.6	-1.9 s	
College Plans:							
None or under 4 yrs	7500	NA	18.6	20.4	19.5	-0.9	
Complete 4 yrs	8900	NA	14.7	15.4	14.6	-0.8	
Region:							
Northeast	4600	14.7	16.2	17.4	18.3	+0.9	
North Central	5400	17.3	15.8	18.1	15.4	-2.7 s	
South	5000	17.3	18.7	19.0	17.5	-1.5	
West	2800	19.5	16.2	16.9	17.3	+0.4	
Population Density:							
Large SMSA	5500	17.5	16.5	16.8	17.5	+0.7	
Other SMSA	8100	18.1	18.4	18.7	18.0	-0.7	
Non-SMSA	4200	15.4	15.3	18.0	15.3	-2.7	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	17800	10.6	10.3	10.8	9.9	-0.9
Sex:						
Male	8200	10.0	9.4	10.2	9.7	-0.5
Female	9000	11.1	11.0	11.4	10.1	-1.3 ^a
College Plans:						
None or under 4 yrs	7500	NA	11.5	12.3	11.1	-1.2
Complete 4 yrs	8900	NA	8.9	9.0	8.6	-0.4
Region:						
Northeast	4600	9.2	9.7	10.4	10.9	+0.5
North Central	5400	10.6	10.1	11.0	8.8	-2.2 ^a
South	5000	11.3	11.7	11.4	10.5	-0.9
West	2800	11.7	8.5	9.6	8.9	-0.7
Population Density:						
Large SMSA	5500	11.2	9.6	9.6	10.3	+0.7
Other SMSA	8100	11.0	11.3	11.4	10.1	-1.3
Non-SMSA	4200	9.9	9.5	11.0	9.2	-1.8

NOTES: Level of significance of difference between the two most recent classes:

^a = .05, ^{aa} = .01, ^{aaa} = .001.

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	4.1	4.0	4.6	3.4	-1.2 <i>sss</i>	
Sex:							
Male	8200	3.8	3.8	4.4	3.2	-1.2 <i>ss</i>	
Female	9000	4.3	4.2	4.8	3.7	-1.1 <i>ss</i>	
College Plans:							
None or under 4 yrs	7500	NA	4.4	5.4	4.1	-1.3 <i>ss</i>	
Complete 4 yrs	8900	NA	3.3	3.5	2.8	-0.7 <i>s</i>	
Region:							
Northeast	4600	3.2	3.6	4.3	4.1	-0.2	
North Central	5400	4.2	4.1	5.2	3.0	-2.2 <i>sss</i>	
South	5000	4.7	4.7	4.6	3.5	-1.1	
West	2800	4.0	3.0	3.6	3.0	-0.6	
Population Density:							
Large SMSA	5500	4.1	3.6	4.0	3.6	-0.4	
Other SMSA	8100	4.6	4.2	4.4	3.5	-0.9 <i>s</i>	
Non-SMSA	4200	3.5	4.0	5.3	3.2	-2.1 <i>ss</i>	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 10-5

Tranquillizers: Frequency of Use in the Last Year by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	90.1	5.3	2.1	1.0	0.8	0.4	0.3
Sex:								
Male	8200	90.3	5.2	2.0	1.0	0.8	0.3	0.3
Female	9000	89.9	5.6	2.1	1.0	0.8	0.4	0.2
College Plans:								
None or under 4 yrs	7500	88.9	5.7	2.4	1.1	1.0	0.5	0.4
Complete 4 yrs	8900	91.4	4.8	1.8	0.9	0.7	0.3	0.1
Region:								
Northeast	4600	89.0	5.9	2.2	1.2	0.9	0.4	0.3
North Central	5400	91.2	4.6	2.0	0.8	0.7	0.3	0.3
South	5000	89.5	5.6	2.2	1.3	0.8	0.4	0.3
West	2800	91.1	5.2	1.7	0.6	0.7	0.4	0.2
Population Density:								
Large SMSA	5500	89.7	5.9	2.1	1.0	0.7	0.3	0.3
Other SMSA	8100	89.9	5.3	2.3	1.0	0.9	0.3	0.3
Non-SMSA	4200	90.7	4.9	1.7	1.2	0.8	0.4	0.3

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)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
<u>Lifetime use</u>				
No occasions	83.0	83.2	82.0	83.0
1-2 occasions	7.8	7.5	7.8	7.7
3-5 occasions	3.1	3.4	3.3	3.7
6-9 occasions	2.1	2.0	2.1	1.9
10-19 occasions	1.6	1.7	2.1	1.7
20-39 occasions	1.0	1.0	1.2	0.9
40 or more	1.4	1.2	1.5	1.1
	N = (9523)	(15832)	(17574)	(18097)
<u>Use in last twelve months</u>				
No occasions	89.4	89.7	89.2	90.1
1-2 occasions	5.4	5.2	5.1	5.3
3-5 occasions	2.2	2.2	1.9	2.1
6-9 occasions	1.2	1.3	1.6	1.0
10-19 occasions	0.9	0.8	1.1	0.8
20-39 occasions	0.5	0.4	0.5	0.4
40 or more	0.4	0.4	0.5	0.3
	N = (9518)	(15788)	(17538)	(18068)
<u>Use in last thirty days</u>				
No occasions	95.9	96.0	95.4	96.6
1-2 occasions	2.4	2.5	2.5	2.1
3-5 occasions	0.9	0.8	1.0	0.7
6-9 occasions	0.5	0.4	0.5	0.4
10-19 occasions	0.3	0.2	0.3	0.2
20-39 occasions	0.0	0.1	0.1	0.0
40 or more	0.0	0.1	0.1	0.0
	N = (9507)	(15782)	(17520)	(18053)
<u>Probability of future use</u>				
Definitely will not	70.7	69.8	67.1	67.0
Probably will not	25.5	25.9	27.5	28.8
Probably will	3.4	3.8	4.7	3.7
Definitely will	0.4	0.5	0.8	0.5
	N = (2911)	(3031)	(3375)	(3436)

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>	<u>Class of 1978</u>
Sixth grade (or below)	0.2	0.4	0.5	0.7
Seventh or Eighth grade	1.0	0.8	1.7	2.0
Ninth grade	2.9	3.3	3.7	4.2
Tenth grade	3.9	4.7	4.6	4.2
Eleventh grade	5.5	5.7	4.9	4.1
Twelfth grade	3.5	1.9	2.6	1.8
Never used	83.0	83.2	82.0	83.0
	N ^a = (2831)	(2832)	(5821)	(5859)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 10-8

Tranquilizers: Grade in Which First Used by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	0.7	2.0	4.2	4.2	4.1	1.8	83.0
Sex:								
Male	2800	0.7	1.7	3.2	4.7	4.2	1.9	83.6
Female	3100	0.5	2.4	5.2	3.8	3.8	1.9	82.4
College Plans:								
None or under 4 yrs	2500	0.6	2.4	5.4	4.8	4.5	1.9	80.5
Complete 4 yrs	3100	0.6	1.7	3.5	3.5	3.6	1.7	85.4
Region:								
Northeast	1400	0.4	2.1	4.7	4.4	4.3	2.4	81.7
North Central	2000	0.8	2.0	3.5	3.8	3.6	1.7	84.6
South	1600	0.5	1.7	3.9	4.8	4.9	1.7	82.5
West	1000	0.7	2.6	6.8	3.3	2.4	1.5	82.7
Population Density:								
Large SMSA	1800	0.5	2.7	3.6	5.0	3.4	2.3	82.5
Other SMSA	2800	0.5	2.3	4.8	4.3	4.3	1.7	82.0
Non-SMSA	1400	1.0	1.1	4.2	3.3	4.1	1.6	84.7

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	4.1	4.5	5.9	6.9	+1.0 s	
Sex:							
Male	2800	4.4	4.7	5.1	5.6	+0.5	
Female	3100	4.3	4.3	6.3	8.1	+1.8 s	
College Plans:							
None or under 4 yrs	2500	NA	4.3	6.7	8.4	+1.7 s	
Complete 4 yrs	3100	NA	4.2	4.7	5.8	+1.1	
Region:							
Northeast	1400	3.0	4.5	6.1	7.2	+1.1	
North-Central	2000	4.0	3.8	5.2	6.3	+1.1	
South	1600	4.5	5.4	6.6	6.1	-0.5	
West	1000	5.9	2.2	5.1	10.1	+5.0 sss	
Population Density:							
Large SMSA	1800	4.6	4.4	5.3	6.8	+1.5	
Other SMSA	2800	4.3	4.9	6.1	7.6	+1.5 s	
Non-SMSA	1400	3.9	3.9	5.9	6.3	+0.4	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 10-10

Tranquilizers: Trends in Degree and Duration of Feeling High

Q. <i>When you take tranquilizers how high do you usually get?</i>	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>	Class of <u>1978</u>
PERCENT OF RECENT USERS:^a				
I don't take them to get high	17.9	18.5	23.6	23.0
Not at all high	11.1	16.2	12.4	14.0
A little high	30.1	24.1	29.5	27.0
Moderately high	28.9	31.4	25.8	29.1
Very high	11.9	9.8	8.7	6.8
	N = (159)	(235)	(283)	(267)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	89.4	89.7	89.2	90.1
I don't take them to get high	1.9	1.9	2.5	2.3
Not at all high	1.2	1.7	1.3	1.4
A little high	3.2	2.5	3.2	2.7
Moderately high	3.1	3.2	2.8	2.9
Very high	1.3	1.0	0.9	0.7
	N = (1500)	(2282)	(2620)	(2697)
Q. <i>When you take tranquilizers how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	29.9	33.0	31.6	32.7
One to two hours	17.6	24.1	22.5	26.0
Three to six hours	42.9	35.6	38.8	32.3
Seven to 24 hours	9.5	6.5	6.1	8.7
More than 24 hours	0.0	0.7	1.0	0.4
	N = (158)	(236)	(282)	(269)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	89.4	89.7	89.2	90.1
Usually don't get high	3.2	3.4	3.4	3.2
One to two hours	1.9	2.5	2.4	2.6
Three to six hours	4.5	3.7	4.2	3.2
Seven to 24 hours	1.0	0.7	0.7	0.9
More than 24 hours	0.0	0.1	0.1	0.0
	N = (1491)	(2291)	(2611)	(2717)

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

FIGURE 10-1

Tranquilizers: Reconstructed Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.

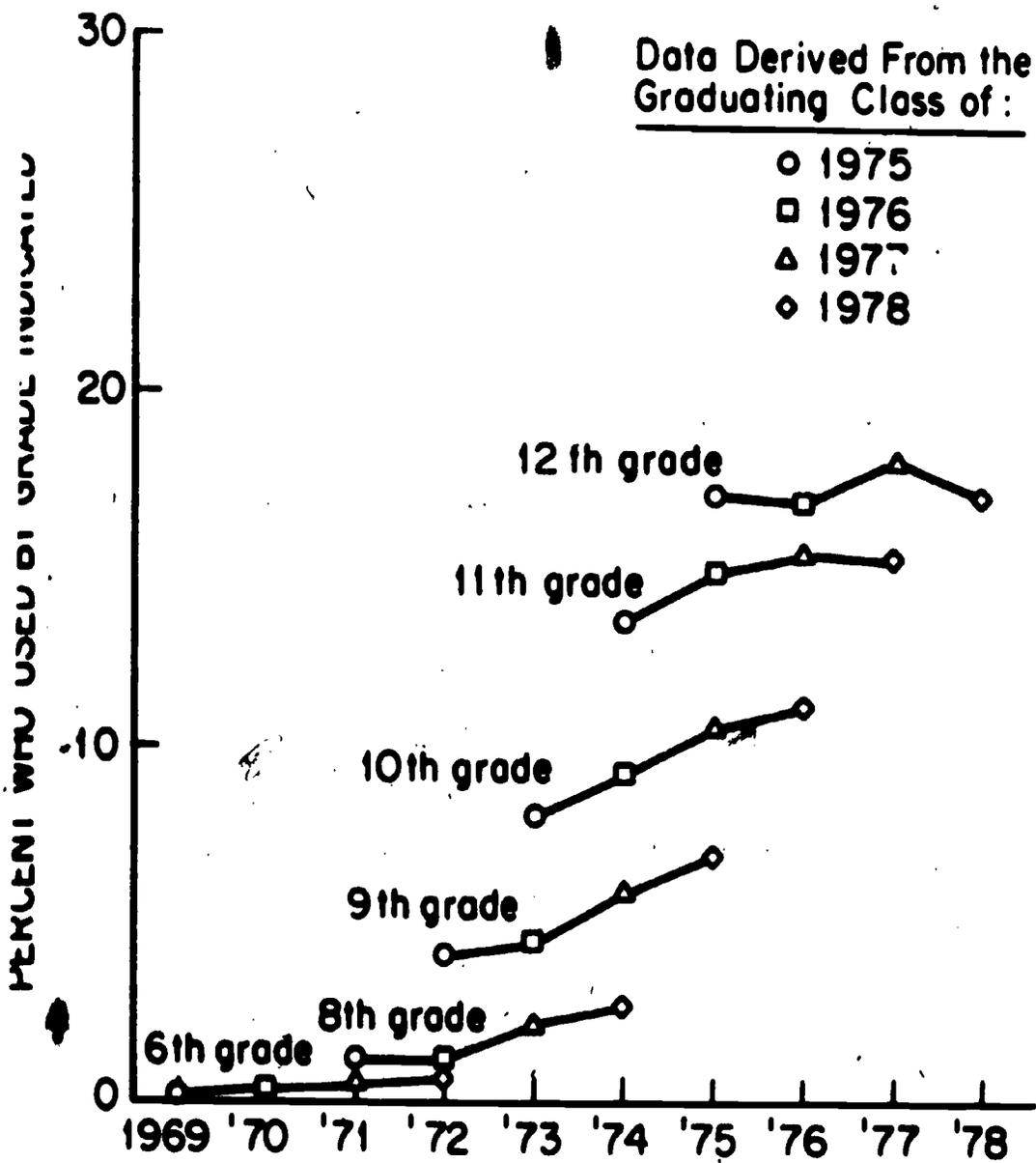
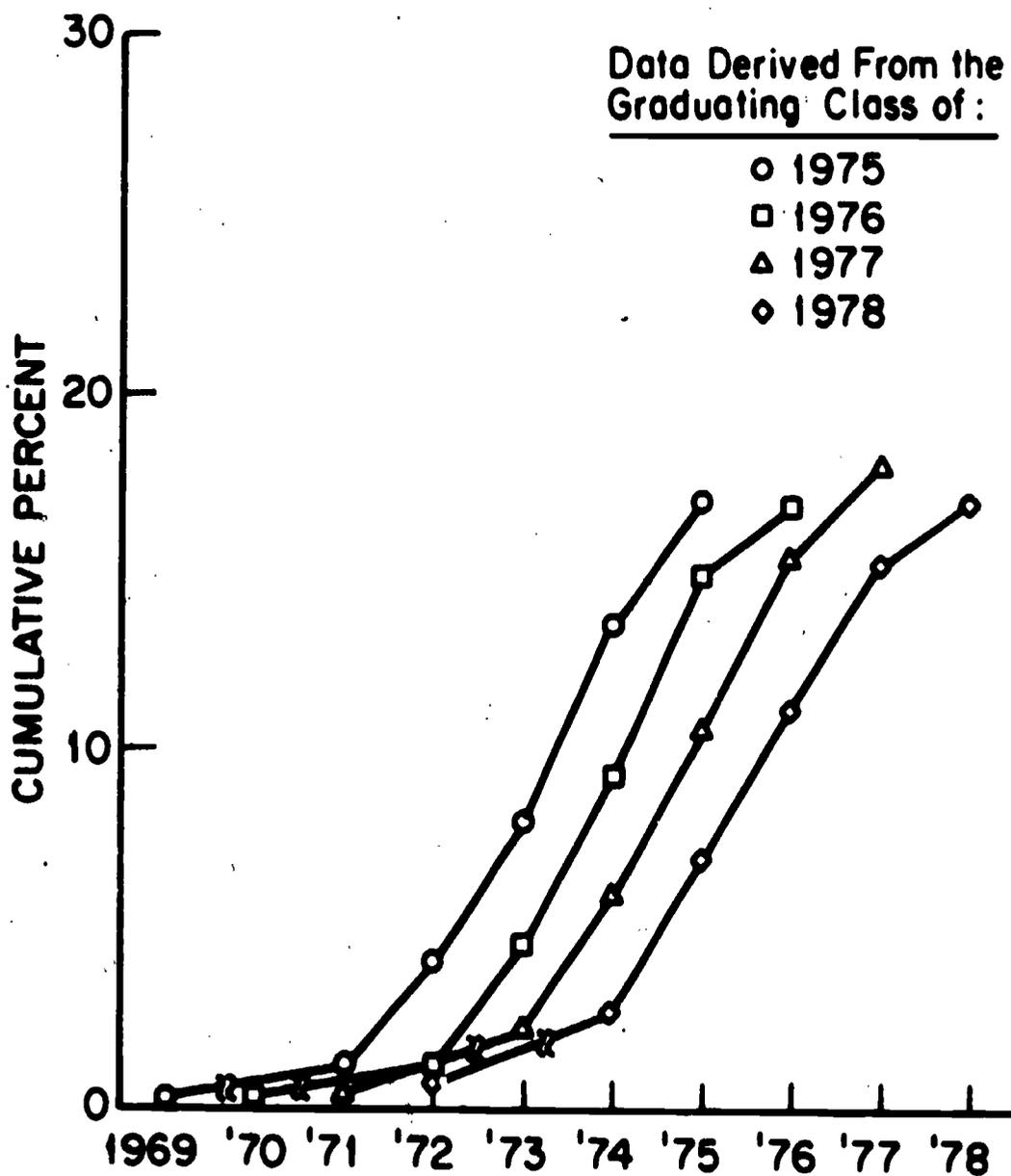


FIGURE 10-2

Tranquilizers: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

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 senior 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, while Tables 11-16 through 11-18 deal with the number of occasions on which respondents consumed five or more drinks in a row.

Prevalence of Use in 1978

<u>Total Sample</u>	<u>Table(s)</u>
● Nearly all seniors (93%) have <u>tried</u> alcohol, and the great majority (88%) have used it during the past year.	2,3,4
● Most (72%) have used it during the month prior to the survey.	
● Half (50%) 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 5.8% of the sample.	6
● Importantly, fully 40% indicated that they had consumed five or more drinks on at least one occasion during the previous two-week interval. Nearly 6% reported such heavy drinking on six or more occasions.	16

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 67% of the females. About twice as many males as females (29% versus

Table(s)

14%) report using alcohol 40 or more times during the past year; and daily use occurs more than twice as often among males as among females (8.3% vs. 3.2%).

- College Plans. Annual and monthly prevalence rates are about the same for those planning four years of college, as for those who are not. However, 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 (23%). Similarly, daily use is only half as prevalent among the college-bound (4.1% vs. 7.3%). 2,3,4,5,10,17
- 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 prevalence 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 average for the Northeast and North Central is 78%. More frequent use is also less common in the South and West. 2,3,4,5,10,17
- 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 76% for large metropolitan areas, 73% for other metropolitan areas, and 68% for non-metropolitan areas. This modest relationship has been replicated in all four years of the study. There are, however, rather small differences among the three urbanicity levels in the percentage using on 20 or more occasions in the past month, which suggests that the urbanicity differences primarily reflect differences in the number of infrequent and occasional drinkers. 2,3,4,5,10,17

Recent Trends in PrevalenceTotal Sample

- The data indicate some slight upward shifts in the lifetime, annual, and 30-day prevalence for alcohol use among high school seniors over the past three years. 2,3,4
- Annual prevalence rose from about 85% in 1975 to 88% in 1978. Thirty-day prevalence rose over the same time span from 68% to 72%. 3,4
- The proportion using frequently has also risen slightly, primarily in the last two years. Use on 20 or more occasions in the preceding year was 32.3% in 1975, 32.5% in 1976, 34.8% in 1977. 6
- Drinking 5 or more drinks per occasion occurred somewhat more frequently in 1978 than in 1975. Such heavy drinking over a two-week interval was reported by 40% in 1978 versus 37% in 1975. 18

Table(s)

- On the other hand, daily use (defined as 20-plus occasions in the prior month) has remained essentially steady between 1975 and 1978. From levels of 5.7% in 1975 and 5.6% in 1976, daily use rose slightly to 6.1% in 1977, only to drop back to 5.8% in 1978. None of these changes is statistically significant.

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, the other regions have had increases since 1975 and appear to be narrowing the gap. Thirty-day prevalence in the North Central rose from 71% to 77% between 1975 and 1978, while in the West it rose from 60% to 63% and in the South from 63% to 67%. 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 1978 the 30-day prevalence rates rose from 63.2% to 68.4% for those in Non-SMSAs, while they remained at about 75% for those in Large SMSAs. Thus, a gap of about 12% in 1975 was reduced to 7% in 1978. 2,3,4,5,10

Use at Earlier Grade Levels

- Over half of all respondents (56%) have tried alcohol before reaching tenth grade—by far the highest figure for any of the drugs discussed in this volume. The modal (and median) grade of first use remains ninth grade, in which 24% first tried it. 7
- Each of the last four graduating cohorts has shown a very similar pattern of onset with age, as Figure 2 illustrates. Fig 2
- To the extent there has been any change, it is that there has been a slight upward trend in lifetime prevalence in grade levels eight, nine, and ten during the early seventies—the period for which we can reconstruct prevalence rates (using the retrospective data from these four cohorts). However, these shifts have been very small and stand in marked contrast to the impression created in the media in recent years regarding a virtual epidemic of alcohol use by teenagers. It appears that the problem, which certainly is considerable, has not gotten much worse but rather has received more public attention. Fig 1

Table(s)

- Regarding subgroup differences, males are more likely than females to have tried alcohol at an early age (37% versus 27% by eighth grade), but by later grades nearly all females as well as males have tried alcohol. First alcohol use tends to occur somewhat earlier among those in more urban settings and those in the Northeast, which is itself very urban. Early use tends to occur later than average in the South. 8,9
- However, the students from less urban settings appear to be catching up in terms of early onset, as are females and those from the South. In sum, the sex, regional, and urbanicity differences for early onset are substantially smaller in the Class of 1978 than they were in the Class of 1975. 9

Probability of Future Use

- Over two-thirds of 1978 seniors (71%) expect to be using alcohol five years in the future. 6
- This proportion has increased slightly (i.e., by 3%) 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—28%). This clearly reflects alcohol's continuing widespread acceptance as a recreational drug. 6

Degree and Duration of Highs

- Of those who used alcohol in the prior year (nearly nine out of every ten seniors), most said they usually get "moderately high" (40%) or "a little high" (34%) when they drink. (In contrast to most of the other drugs, it seems likely that there is more variability from occasion to occasion with alcohol.) Only 7% said they usually get "very high." 11
- There is a slight upward trend in the degree of high usually experienced. For example, the percent of recent users who say they usually do not get high when using alcohol has dropped gradually from 24% in 1975 to 19% in 1978. 11
- There is also a slight upward trend in the duration of the alcohol highs usually experienced by seniors. In 1975, 34% of the users said they usually stayed high three hours or more; by 1978 this number had risen to 39%. 11
- These changes are consistent with the gradually rising proportions who report occasions of heavy drinking (5 plus drinks per occasion) over the previous two weeks. 16
- In sum, at the same time there has been a very gradual increase (1% each year) in the proportion who use alcohol during their senior year, there has also been a very gradual

increase in the quantity of alcohol consumed per occasion by the average user.

- There also exist some interesting subgroup differences on these measures of quantity consumed per occasion. Consistent with the subgroup differences reported above on frequent drinking (particularly at the daily level), males on the average get higher and stay high longer than females. The noncollege-bound users also tend to be heavier drinkers, when they drink, than the college-bound. Drinkers in the Northeast and North Central, the two regions of the country which had the highest frequency of drinking levels, also report getting slightly higher and staying high slightly longer (on the average) than drinkers in the South and West, although these regional differences are quite small. Regarding urbanicity, there is practically no association between the degree and duration of highs reported by alcohol users and the size of the community in which they live. Recall (from Table 10) that urbanicity bears little or no relationship to frequent drinking.
- Virtually all of these subgroup comparisons are also reflected in the data on heavy drinking during the prior two-week interval.

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TABLE 11-1

Alcohol: Prevalence (Ever Used) and Recency of Use
by Subgroups, Class of 1978
 (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	17800	93.1	72.1	15.6	5.4	6.9
Sex:						
Male	8200	94.4	77.5	12.5	4.4	5.6
Female	9000	91.9	67.1	18.6	6.2	8.1
College Plans:						
None or under 4 yrs	7500	93.2	72.7	15.3	5.2	6.8
Complete 4 yrs	8900	93.0	71.5	16.1	5.4	7.0
Region:						
Northeast	4600	95.7	78.0	14.5	3.2	4.3
North Central	5400	95.0	77.2	13.8	4.0	5.0
South	5000	90.7	67.0	16.2	7.5	9.3
West	2800	89.8	63.1	19.7	7.0	10.2
Population Density:						
Large SMSA	5500	95.0	75.5	15.2	4.3	5.0
Other SMSA	8100	93.2	72.7	15.1	5.4	6.8
Non-SMSA	4200	91.3	68.4	16.6	6.3	8.7

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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	90.4	91.9	92.5	93.1	+0.6	
Sex:							
Male	8200	92.0	93.2	94.2	94.4	+0.2	
Female	9000	89.2	90.6	90.9	91.9	+1.0	
College Plans:							
None or under 4 yrs	7500	NA	92.4	93.0	93.2	+0.2	
Complete 4 yrs	8900	NA	91.4	92.2	93.0	+0.8	
Region:							
Northeast	4600	95.0	95.4	96.0	95.7	-0.3	
North Central	5400	92.0	93.5	94.5	95.0	+0.5	
South	5000	88.0	88.8	89.1	90.7	+1.6	
West	2800	85.0	89.3	89.2	89.9	+0.7	
Population Density:							
Large SMSA	5500	95.4	95.0	94.7	95.0	+0.3	
Other SMSA	8100	90.5	91.0	92.9	93.2	+0.3	
Non-SMSA	4200	87.2	90.6	90.2	91.3	+1.1	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last twelve months</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	84.8	85.7	87.0	87.7	+0.7	
Sex:							
Male	8200	88.1	88.3	90.0	90.0	.0	
Female	9000	82.1	83.2	84.3	85.7	+1.4	
College Plans:							
None or under 4 yrs	7500	NA	86.7	87.7	88.0	+0.3	
Complete 4 yrs	8900	NA	84.9	86.5	87.6	+1.1	
Region:							
Northeast	4600	91.9	91.6	92.8	92.5	-0.3	
North Central	5400	87.6	88.7	90.4	91.0	+0.6	
South	5000	79.9	80.2	81.0	83.2	+2.2	
West	2800	78.2	81.2	82.3	82.8	+0.5	
Population Density:							
Large SMSA	5500	91.7	90.4	90.4	90.7	+0.3	
Other SMSA	8100	85.1	84.7	87.6	87.8	+0.2	
Non-SMSA	4200	80.0	83.4	83.4	85.0	+1.6	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>				'77-'78 <i>change</i>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	
All seniors	17800	68.2	68.3	71.2	72.1	+0.9
Sex:						
Male	8200	75.0	74.5	77.8	77.5	-0.3
Female	9000	62.2	61.8	65.0	67.1	+2.1
College Plans:						
None or under 4 yrs	7500	NA	69.9	72.8	72.7	-0.1
Complete 4 yrs	8900	NA	66.5	69.4	71.6	+2.2
Region:						
Northeast	4600	76.9	75.7	76.6	78.0	+1.4
North Central	5400	71.1	73.2	76.4	77.2	+0.8
South	5000	62.8	60.2	64.7	67.0	+2.3
West	2800	60.0	62.2	64.4	63.1	-1.3
Population Density:						
Large SMSA	5500	75.3	72.6	74.0	75.5	+1.5
Other SMSA	8100	68.5	67.0	72.0	72.7	+0.7
Non-SMSA	4200	63.2	66.5	67.8	68.4	+0.6

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years 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 1978

(Entries are percentages which sum horizontally)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17800	12.3	12.3	11.4	11.6	16.3	14.7	21.5
Sex:								
Male	8200	10.0	9.6	9.2	10.4	16.5	14.9	29.3
Female	9000	14.3	15.0	13.4	12.7	16.2	14.5	14.0
College Plans:								
None or under 4 yrs	7500	12.0	12.6	11.3	11.1	15.8	14.1	23.0
Complete 4 yrs	8900	12.4	12.0	11.6	12.2	17.1	15.4	19.4
Region:								
Northeast	4600	7.5	10.8	10.9	12.5	17.6	16.4	24.4
North Central	5400	9.0	11.1	10.4	11.6	17.7	16.0	24.2
South	5000	16.8	13.6	12.0	11.1	14.4	13.0	19.1
West	2800	17.2	14.4	13.0	10.9	15.3	13.0	16.2
Population Density:								
Large SMSA	5500	9.3	11.6	11.4	12.5	17.0	15.2	23.0
Other SMSA	8100	12.2	11.3	11.6	12.0	16.5	15.2	21.2
Non-SMSA	4200	15.0	14.4	11.0	10.2	15.3	13.4	20.6

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>Class of 1978</u>
<u>Lifetime use</u>				
No occasions	9.6	8.1	7.5	6.9
1-2 occasions	7.6	8.0	7.1	7.0
3-5 occasions	8.8	8.3	8.2	7.4
6-9 occasions	8.3	8.5	8.3	8.1
10-19 occasions	12.6	11.9	12.0	12.2
20-39 occasions	13.6	13.5	13.7	13.2
40 or more	39.6	41.7	43.2	45.2
	N = (9796)	(15385)	(17116)	(17615)
<u>Use in last twelve months</u>				
No occasions	15.2	14.3	13.0	12.3
1-2 occasions	12.8	13.3	12.9	12.3
3-5 occasions	12.5	12.3	11.6	11.4
6-9 occasions	11.5	11.1	11.7	11.6
10-19 occasions	15.7	16.5	16.0	16.3
20-39 occasions	13.0	12.6	13.2	14.7
40 or more	19.3	19.9	21.6	21.5
	N = (9738)	(15345)	(17047)	(17547)
<u>Use in last thirty days</u>				
No occasions	31.8	31.7	28.8	27.9
1-2 occasions	22.1	22.0	22.2	21.8
3-5 occasions	17.5	18.4	18.3	18.9
6-9 occasions	12.8	12.6	13.4	14.4
10-19 occasions	10.1	9.6	11.2	11.4
20-39 occasions	3.5	3.3	3.5	3.5
40 or more	2.2	2.3	2.6	2.3
	N = (9737)	(15377)	(17087)	(17601)
<u>Probability of future use</u>				
Definitely will not	17.0	18.1	13.9	13.8
Probably will not	14.7	19.7	16.7	15.3
Probably will	54.4	53.3	54.8	55.8
Definitely will	13.9	12.9	14.6	15.0
	N = (3078)	(3263)	(3623)	(3732)

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>	<u>Class of 1978</u>
Sixth grade (or below)	9.8	7.5	7.8	9.1
Seventh or Eighth grade	17.5	21.5	21.1	22.5
Ninth grade	23.1	23.0	24.1	24.1
Tenth grade	18.4	19.7	18.4	18.2
Eleventh grade	15.5	13.0	13.9	12.9
Twelfth grade	6.2	7.3	7.1	6.2
Never used	9.6	8.1	7.5	6.9
	N ^a = (3037)	(2776)	(5792)	(5928)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 11-8

Alcohol: Grade in Which First Used by Subgroups, Class of 1978
 (Entries are percentages which sum horizontally)

	<u>Number of Cases</u>	<u>Grade in school</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	6000	9.1	22.5	24.1	18.2	12.9	6.2	6.9
Sex:								
Male	2800	11.4	25.1	25.3	16.9	11.0	4.6	5.6
Female	3100	6.8	20.1	22.9	19.4	14.9	7.8	8.1
College Plans:								
None or under 4 yrs	2500	10.0	22.6	24.8	16.6	12.6	6.6	6.8
Complete 4 yrs	3100	8.3	22.2	23.2	19.7	13.5	5.9	7.0
Region:								
Northeast	1400	10.1	28.1	24.6	16.8	10.8	5.4	4.3
North Central	2000	10.5	23.2	23.9	18.9	13.1	5.4	5.0
South	1600	7.1	18.0	24.1	19.5	14.7	7.4	9.3
West	1000	9.4	22.9	23.7	15.4	11.8	6.7	10.1
Population Density:								
Large SMSA	1800	9.6	26.2	23.8	17.3	12.8	5.3	5.0
Other SMSA	2800	9.1	22.5	23.6	19.7	12.2	6.1	6.8
Non-SMSA	1400	8.6	19.8	24.9	16.8	14.0	7.2	8.7

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 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	50.4	52.0	53.0	55.7	+2.7 s	
Sex:							
Male	2800	59.0	58.5	59.1	61.8	+2.7	
Female	3100	42.2	45.2	47.1	49.8	+2.7	
College Plans:							
None or under 4 yrs	2500	NA	52.3	55.8	57.4	+1.6	
Complete 4 yrs	3100	NA	50.8	49.1	53.7	+4.6 ss	
Region:							
Northeast	1400	60.8	60.1	59.2	62.8	+3.6 *	
North Central	2000	50.7	54.7	56.1	57.6	+1.6	
South	1600	40.8	41.5	44.5	49.2	+4.7 s	
West	1000	54.9	53.6	54.0	56.0	+2.0	
Population Density:							
Large SMSA	1800	57.1	57.0	58.8	59.6	+0.8	
Other SMSA	2800	49.8	50.2	50.4	55.2	+4.8 ss	
Non-SMSA	1400	46.9	50.0	51.7	53.3	+1.6	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 11-10

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

	Number of Cases (Class of 1978)	<u>Percent who used daily in last thirty days^a</u>				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
All seniors	17800	5.7	5.6	6.1	5.7	-0.4
Sex:						
Male	8200	8.6	8.1	8.6	8.3	-0.3
Female	9000	3.0	2.7	3.6	3.2	-0.4
College Plans:						
None or under 4 yrs	7500	NA	7.3	8.0	7.3	-0.7
Complete 4 yrs	8900	NA	3.5	4.0	4.1	+0.1
Region:						
Northeast	4600	6.1	6.3	6.5	6.2	-0.3
North Central	5400	6.6	6.9	6.7	7.0	+0.3
South	5000	5.1	4.6	5.9	5.0	-0.9
West	2800	4.5	3.8	4.3	3.8	-0.5
Population Density:						
Large SMSA	5500	6.1	5.4	5.9	6.2	+0.3
Other SMSA	8100	5.4	5.3	5.8	5.5	-0.3
Non-SMSA	4200	5.9	6.1	6.5	5.7	-0.8

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aDaily use is defined as use on 20 or more occasions in the past thirty days.

TABLE 11-11

Alcohol: Trends in Degree and Duration of Feeling High

Q. <i>When you drink alcoholic beverages how high do you usually get?</i>	Class of 1975	Class of 1976	Class of 1977	Class of 1978
PERCENT OF RECENT USERS:^a				
Not at all high	23.6	21.6	20.6	19.1
A little high	33.8	32.3	32.8	33.9
Moderately high	35.9	38.0	39.6	39.9
Very high	6.6	8.1	7.0	7.1
	N = (2419)	(2608)	(3001)	(3124)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	15.2	14.3	13.0	12.3
Not at all high	20.0	18.5	17.9	16.8
A little high	28.7	27.7	28.5	29.7
Moderately high	30.4	32.6	34.5	35.0
Very high	5.6	6.9	6.1	6.2
	N = (2853)	(3043)	(3449)	(3562)
Q. <i>When you drink alcoholic beverages how long do you usually stay high?</i>				
PERCENT OF RECENT USERS:^a				
Usually don't get high	25.7	24.6	22.6	21.3
One to two hours	40.5	38.5	38.8	39.8
Three to six hours	30.1	33.8	34.8	35.7
Seven to 24 hours	3.4	3.0	3.5	3.1
More than 24 hours	0.2	0.2	0.3	0.1
	N = (2403)	(2597)	(2965)	(3098)
PERCENT OF ALL RESPONDENTS:				
Did not use in last 12 months	15.2	14.3	13.0	12.3
Usually don't get high	21.8	21.1	19.7	18.7
One to two hours	34.3	33.0	33.8	34.9
Three to six hours	25.5	29.0	30.3	31.3
Seven to 24 hours	2.9	2.6	3.0	2.7
More than 24 hours	0.2	0.2	0.3	0.1
	N = (2834)	(3030)	(3408)	(3532)

^aFigures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 11-12

Alcohol: Degree of Feeling High, Class of 1978

Q. <i>When you drink alcoholic beverages how high do you usually get?</i>	Number of Cases	Percent of recent users ^a saying:			
		<u>Not at all</u>	<u>A little</u>	<u>Moderately</u>	<u>Very</u>
All seniors	3124	19.1	33.9	39.9	7.1
Sex:					
Male	1464	13.5	33.3	44.8	8.4
Female	1505	25.4	35.3	34.5	4.7
College Plans:					
None or under 4 yrs	1196	17.6	35.6	39.5	7.3
Complete 4 yrs	1528	22.3	33.5	39.3	5.0
Region:					
Northeast	842	16.3	34.4	40.2	9.0
North Central	987	18.1	33.8	42.5	5.6
South	843	22.1	33.5	37.8	6.5
West	452	20.2	34.1	37.7	8.0
Population Density:					
Large SMSA	982	18.2	34.9	39.4	7.5
Other SMSA	1427	18.6	34.1	39.5	7.8
Non-SMSA	715	20.8	32.7	40.9	5.6

NOTE: See Appendix D for definition of variables.

^aFigures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 11-13

Alcohol: Degree of Feeling High, Class of 1978

Q. <i>When you drink alcoholic beverages how high do you usually get?</i>	Number of Cases	Percent of all respondents ^a saying:				
		Did not use in last 12 months	Not at all	A little	Moderately	Very
All seniors	3562	12.3	16.8	29.7	35.0	6.2
Sex:						
Male	1627	10.0	12.2	30.0	40.3	7.6
Female	1756	14.3	21.8	30.3	29.6	4.0
College Plans:						
None or under 4 yrs	1359	12.0	15.5	31.3	34.8	6.4
Complete 4 yrs	1744	12.4	19.5	29.3	34.4	4.4
Region:						
Northeast	910	7.5	15.1	31.8	37.2	8.3
North Central	1085	9.0	16.5	30.8	38.7	5.1
South	1013	16.8	18.4	27.9	31.4	5.4
West	546	17.2	16.7	28.2	31.2	6.6
Population Density:						
Large SMSA	1083	9.3	16.5	31.7	35.7	6.8
Other SMSA	1625	12.2	16.3	29.9	34.7	6.8
Non-SMSA	841	15.0	17.7	27.8	34.8	4.8

NOTE: See Appendix D for definition of variables.

^aFigures are based on all respondents, whether or not they use the drug.

TABLE 11-14

Alcohol: Duration of Feeling High, Class of 1978

Q. <i>When you drink alcoholic beverages how long do you usually stay high?</i>	Number of Cases	Percent of recent users ^a saying:				
		Usually don't get high	1-2 hours	3-6 hours	7-24 hours	More than 24 hours
All seniors	3098	21.3	39.8	35.7	3.1	0.1
Sex:						
Male	1456	15.5	39.5	41.6	3.2	0.2
Female	1491	27.6	40.5	29.4	2.5	0.0
College Plans:						
None or under 4 yrs	1185	19.5	39.1	38.0	3.2	0.2
Complete 4 yrs	1517	24.6	41.2	31.9	2.3	0.0
Region:						
Northeast	836	18.3	39.7	38.1	3.9	0.0
North Central	980	20.6	39.2	37.4	2.9	0.0
South	834	24.5	41.0	31.4	2.8	0.3
West	448	21.5	38.7	36.8	3.1	0.0
Population Density:						
Large SMSA	971	20.5	40.1	36.6	2.7	0.0
Other SMSA	1415	21.2	41.3	34.2	3.1	0.2
Non-SMSA	712	22.2	37.2	37.1	3.6	0.0

NOTE: See Appendix D for definition of variables.

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

TABLE 11-15

Alcohol: Duration of Feeling High, Class of 1978

Q. When you drink alcoholic beverages how long do you usually stay high?	Number of Cases	Percent of all respondents ^a saying:					
		Did not use in last 12 months	Usually don't get high	1-2 hours	3-6 hours	7-24 hours	More than 24 hours
All seniors	3532	12.3	18.7	34.9	31.3	2.7	0.1
Sex:							
Male	1618	10.0	14.0	35.6	37.4	2.9	0.2
Female	1740	14.3	23.7	34.7	25.2	2.1	0.0
College Plans:							
None or under 4 yrs	1347	12.0	17.2	34.4	33.4	2.8	0.2
Complete 4 yrs	1732	12.4	21.5	36.1	27.9	2.0	0.0
Region:							
Northeast	904	7.5	16.9	36.7	35.2	3.6	0.0
North Central	1077	9.0	18.7	35.7	34.0	2.6	0.0
South	1002	16.8	20.4	34.1	26.1	2.3	0.2
West	541	17.2	17.8	32.0	30.5	2.6	0.0
Population Density:							
Large SMSA	1071	9.3	18.6	36.4	33.2	2.4	0.0
Other SMSA	1612	12.2	18.6	36.3	30.0	2.7	0.2
Non-SMSA	838	15.0	18.9	31.6	31.5	3.1	0.0

NOTE: See Appendix D for definition of variables.

^aFigures are based on all respondents, whether or not they use the drug.

TABLE 11-16

Alcohol: Trends in Two-Week Frequency of Heavy Drinking
(Entries are percentages)

<i>Q. Think back over the LAST TWO WEEKS. How many times have you had five or more drinks in a row?</i>	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>
None	63.2	62.9	60.6	59.7
Once	11.4	11.4	11.7	12.5
Twice	9.6	10.0	9.8	10.2
Three to five times	9.9	10.5	11.4	12.0
Six to nine times	3.6	3.1	4.0	3.3
Ten or more times	2.3	2.1	2.5	2.2
	N = (9804)	(15068)	(16840)	(17274)

TABLE 11-17

**Alcohol: Two-Week Frequency of Heavy Drinking
by Subgroups, Class of 1978**

(Entries are percentages)

	Number of Cases	Number of occasions respondent had 5 or more drinks					
		None	Once	Twice	3-5 times	6-9 times	10+ times
All seniors	17800	59.7	12.5	10.2	12.0	3.3	2.2
Sex:							
Male	8200	48.6	13.8	12.8	16.3	5.0	3.6
Female	9000	70.4	11.4	7.9	7.8	1.7	0.9
College Plans:							
None or under 4 yrs	7500	55.7	11.9	11.5	13.8	4.2	3.0
Complete 4 yrs	8900	64.1	13.1	9.0	10.0	2.4	1.3
Region:							
Northeast	4600	56.5	13.4	11.4	12.7	3.7	2.3
North Central	5400	54.7	13.4	11.1	14.5	4.1	2.2
South	5000	63.6	12.0	8.9	10.5	2.7	2.3
West	2800	66.7	10.2	9.6	9.5	2.3	1.7
Population Density:							
Large SMSA	5500	60.5	12.7	10.3	11.5	3.1	1.9
Other SMSA	8100	59.9	12.8	10.4	11.9	3.2	1.8
Non-SMSA	4200	58.7	12.0	10.0	12.7	3.6	3.1

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

TABLE 11-18
Alcohol: Trends in Two-Week Prevalence of Heavy Drinking
by Subgroups

	Number of Cases (Class of 1978)	Percent reporting 5+ drinks on one or more occasions				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	36.8	37.1	39.4	40.3	+0.9
Sex:						
Male	8200	49.0	47.9	50.0	51.4	+1.4
Female	9000	26.4	25.9	29.3	29.6	+0.3
College Plans:						
None or under 4 yrs	7500	NA	41.8	44.7	44.3	-0.4
Complete 4 yrs	8900	NA	31.5	33.9	35.9	+2.0
Region:						
Northeast	4600	43.0	40.8	40.0	43.5	+3.5
North Central	5400	40.6	42.8	44.5	45.3	+0.8
South	5000	32.1	30.8	36.3	36.4	+0.1
West	2800	29.0	32.8	34.2	33.3	-0.9
Population Density:						
Large SMSA	5500	37.9	37.0	38.1	39.5	+1.4
Other SMSA	8100	36.1	36.8	39.5	40.1	+0.6
Non-SMSA	4200	36.9	38.0	40.5	41.3	+0.8

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

FIGURE 11-1

Alcohol: Reconstructed Trends in Lifetime Prevalence for 6th Graders, 8th Graders, 9th Graders, etc.

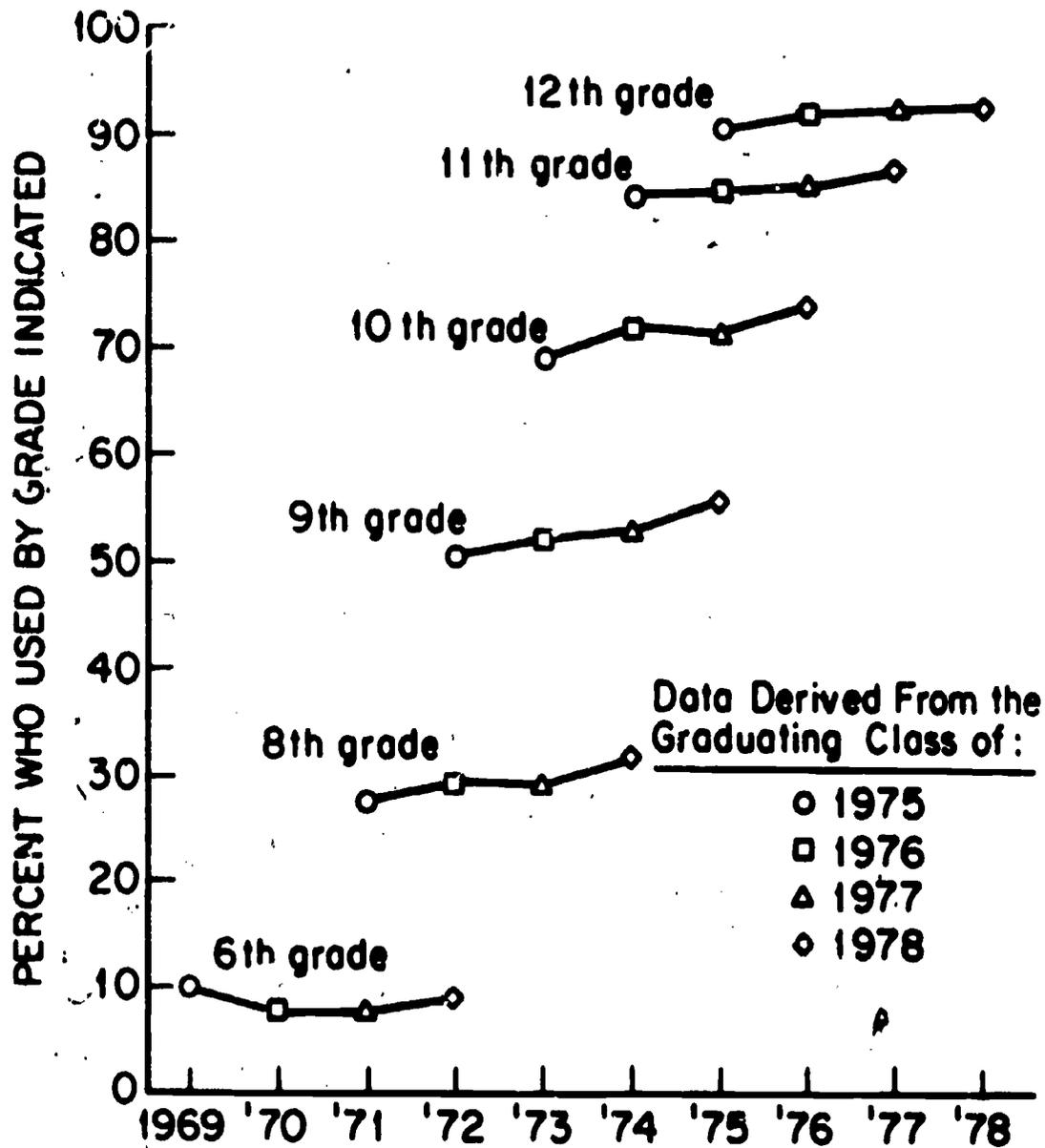
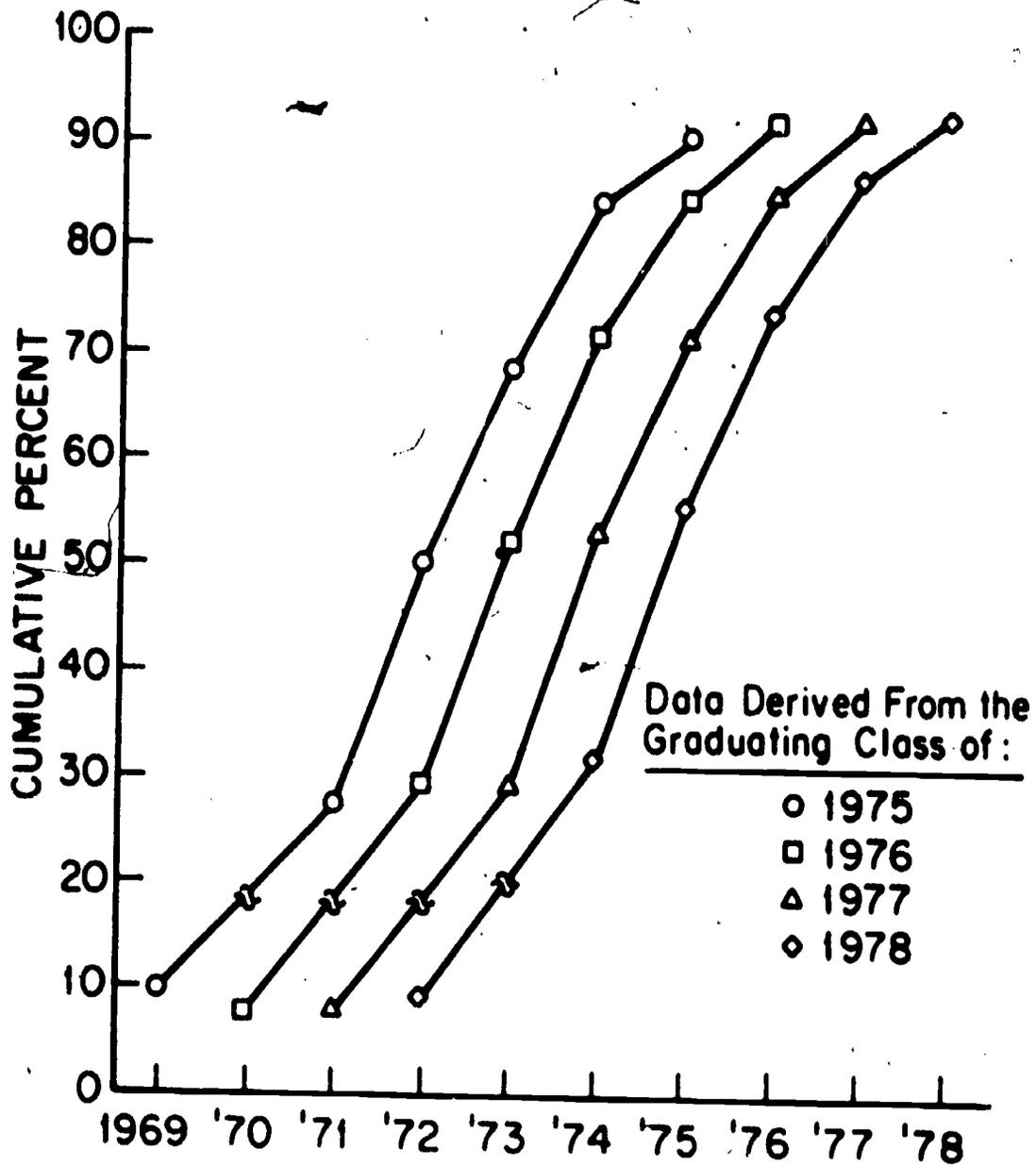


FIGURE 11-2

Alcohol: Cumulative Lifetime Prevalence for Each Graduating Class by Grade Level



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

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 1978

<u>Total Sample</u>	<u>Table(s)</u>
<ul style="list-style-type: none">● Three-quarters of the seniors (75%) 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.	1,2
<ul style="list-style-type: none">● A quarter of the sample (23%) describe themselves as smoking "regularly now," although on a separate question about 28% indicate smoking one or more cigarettes per day in the most recent month.	1,5
<ul style="list-style-type: none">● Another 9% say they smoked "regularly in the past," but do not now.	1
<ul style="list-style-type: none">● The proportion smoking half-a-pack per day or more in the last month is 18.7%, or about one out of every five seniors. Of these, the great majority report smoking either "about a half-a-pack a day" (9.0%) or "about a pack a day" (7.7%).	4,5

Subgroup DifferencesTable(s)

- About the same proportion of all subgroups (around 75%) have at least tried smoking, with two exceptions. Fewer of the college-bound (69%) or those in the West (69%) have ever smoked. However, there are much greater differences in rates for current regular smoking related to college plans and region of the country. 2
- College Plans. Smoking is very 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 (25.5% vs. 11.1%). 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 (23.6%), which has the heaviest rate of use, as in the West (12.2%) which has the lightest use. The North Central and South have about average rates of use at about 20% and 17%, respectively. (These regional differences have been replicated in all four senior classes.) 4,5
- Sex Differences. For the class of 1978 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% vs. 18% in the last 30 days). Among those "smokers," however, males appear to consume a slightly larger number of cigarettes on the average. For example, almost 3% more males than females (10.9% vs. 8.3%) report smoking a pack or more per day (a difference significant at the .001 level). 4,5
- Population Density. The use of cigarettes—particularly current, regular use—is not very different for the three urbanicity levels examined. However, there does appear to be a slight curvilinear relation between population density and smoking, in that the smaller metropolitan areas (Other SMSAs) have consistently had the lowest smoking rates. 4,5

Recent Trends in PrevalenceTotal Sample

- There has been very little change between 1976 and 1978 in the observed rate of regular smoking (19.2% vs. 18.8%, respectively, smoking half-a-pack a day or more). 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

- However, the proportion smoking at all in the previous month dropped a modest, but statistically significant, amount this year (from 38.4% to 36.7%). The fact that thirty day prevalence and half-a-pack per day prevalence both dropped in nearly all subgroups this year gives reason to hope that we may be witnessing the beginning of a downturn in smoking among American adolescents. However, another year's data should be examined before hopes are set too high.

3

Subgroup Differences in Trends

- Between 1975 and 1977 regular half-a-pack per day smoking among males of high school age remained constant at about 19.7%, while female use rose from 16.1% to 18.0% (trend significant at .001 level). Thus, previously existing sex differences had been nearly eliminated by 1977. Over the most recent year, both sexes moved in parallel, with regular smoking declining about 0.8% in both groups.
- The only subgroup not showing a decline in half-a-pack per day smoking was the West, which, as was noted earlier, already has by far the lowest rate of regular smoking.

4

4

Use at Earlier Grade Levels

- Of the 32% of seniors who ever smoked on a regular daily basis, nearly two-thirds first did so in ninth grade or earlier. Only 2% of the sample became regular smokers in their senior year. Clearly, for most regular smokers in these recent cohorts, serious smoking began at an early age.
- A comparison of the last four classes indicates a continuing decrease in the average age at which smoking was begun. Only 14% of the Class of 1975 reported regular smoking prior to tenth grade vs. 20% of the Class of 1978.
- Stated differently, the prevalence levels for smoking at earlier grade levels increased during the first half of the 1970's. The indications are, however, that these levels have been flattening out as the data from the next few cohorts hopefully will confirm.
- Regarding subgroup differences in the Class of 1978, early use was very similar for males and females, but it remains dramatically higher among the noncollege-bound (26% prior to tenth grade) vs. the college-bound (14%). Early smoking also remains unusually low in the West (15%).
- The upward trend in early smoking across these four cohorts also pertains for just about all subgroups. However, the increase in daily smoking prior to tenth grade has been most pronounced among females (from 13% to 21%), those from nonurban areas (from 11% to 20%), and those from the South (from 11% to 19%). In essence, these groups have been

7

9
Fig 2

Fig 1

9

9

catching up. The West has been unusual in that it started out with a low rate of early smoking and has remained quite low relative to the other regions.

Probability of Future Use

- Practically no current smokers are resigned to the fact that their habits will continue, since fewer than 1% of the sample say they will "definitely" be smoking five years in the future. This unrealistically low proportion, which has not changed since 1975, bears sad witness to the addicting nature of cigarette smoking. 6
- Substantially more (17% of the sample) say they "probably" will be smoking five years hence. This projection has declined substantially, however, since 1975 when 27% gave the same answer. 6
- More seniors now say the "definitely will not" be smoking five years in the future than in 1975 (55% vs. 41%). It certainly appears that the intentions of adolescents regarding smoking are changing. It remains to be seen whether their behavior will follow suit. 6

TABLE 12-1
Cigarette Use by Subgroups, Class of 1978
 (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	17800	24.7	27.1	16.2	9.1	22.8
Sex:						
Male	8200	25.6	29.3	15.2	8.8	21.1
Female	9000	24.4	25.1	17.2	9.3	24.0
College Plans:						
None or under 4 yrs	7500	19.7	24.3	15.8	9.9	30.2
Complete 4 yrs	8900	30.7	30.1	16.6	8.2	14.4
Region:						
Northeast	4600	23.7	24.3	14.2	9.7	28.0
North Central	5400	23.2	26.5	16.7	9.3	24.3
South	5000	24.1	28.2	18.0	8.8	20.9
West	2800	31.3	30.8	14.4	8.3	15.2
Population Density:						
Large SMSA	5500	25.1	25.9	15.0	9.5	24.4
Other SMSA	8100	25.6	28.0	16.2	9.0	21.2
Non-SMSA	4200	23.2	26.9	17.3	8.8	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 1978)	Percent ever used					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	17800	73.6	75.4	75.7	75.3	-0.4	
Sex:							
Male	8200	75.7	75.6	76.5	74.4	-2.1 ^s	
Female	9000	71.7	74.8	74.8	75.6	+0.8	
College Plans:							
None or under 4 yrs	7500	NA	80.8	81.0	80.3	-0.7	
Complete 4 yrs	8900	NA	69.1	70.0	69.3	-0.7	
Region:							
Northeast	4600	74.7	78.2	76.5	76.3	-0.8	
North Central	5400	75.5	76.3	77.8	76.8	-1.0	
South	5000	72.9	75.6	75.4	75.9	+0.5	
West	2800	69.6	68.8	70.7	68.7	-2.0	
Population Density:							
Large SMSA	5500	74.7	75.5	76.8	74.9	-1.9	
Other SMSA	8100	71.5	73.8	73.8	74.4	+0.6	
Non-SMSA	4200	75.4	77.2	77.3	76.8	-0.5	

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

Number of cases for all previous years 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 1978)	<u>Percent who used in last thirty days</u>					<u>'77-'78 change</u>
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>		
All seniors	17800	36.7	38.8	38.4	36.7	-1.7 s	
Sex:							
Male	8200	37.2	37.7	36.6	34.5	-2.1 s	
Female	9000	35.9	39.1	39.6	38.1	-1.5	
College Plans:							
None or under 4 yrs	7500	NA	46.3	46.2	44.6	-1.6	
Complete 4 yrs	8900	NA	29.8	29.4	27.4	-2.0 s	
Region:							
Northeast	4600	40.1	41.8	43.0	40.6	-2.4	
North Central	5400	39.5	41.3	40.5	39.0	-1.5	
South	5000	36.2	39.1	37.6	35.7	-1.9	
West	2800	26.3	28.3	27.7	27.3	-0.4	
Population Density:							
Large SMSA	5500	39.7	40.4	40.9	37.5	-3.4 s	
Other SMSA	8100	35.1	35.9	36.1	34.3	-1.8	
Non-SMSA	4200	36.7	40.9	39.2	39.4	+0.2	

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

Number of cases for all previous years 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 1978)	Percent who smoked half-pack a day or more in last thirty days				'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	
All seniors	17800	17.9	19.2	19.4	18.8	-0.6
Sex:						
Male	8200	19.6	19.9	19.7	18.9	-0.8
Female	9000	16.1	18.0	18.9	18.0	-0.9
College Plans:						
None or under 4 yrs	7500	NA	25.5	26.9	25.5	-1.4
Complete 4 yrs	8900	NA	11.9	11.2	11.1	-0.1
Region:						
Northeast	4600	22.0	22.5	24.2	23.6	-0.6
North Central	5400	18.8	20.3	20.3	19.8	-0.5
South	5000	16.8	19.0	18.5	17.0	-0.5
West	2800	11.3	12.4	11.5	12.2	+0.7
Population Density:						
Large SMSA	5500	21.7	20.1	20.4	19.7	-0.7
Other SMSA	8100	17.4	18.9	18.8	17.9	-0.9
Non-SMSA	4200	15.9	19.0	19.5	19.3	-0.2

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

Number of cases for all previous years 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 1978

(Entries are percentages which sum horizontally)

	<u>Number of Cases</u>	<u>Not at all</u>	<u>Under 1 per day</u>	<u>1-5 per day</u>	<u>About ½ pack a day</u>	<u>About 1 pack a day</u>	<u>About 1½ pack a day</u>	<u>2 or more pack a day</u>
All seniors	17800	63.3	9.2	8.8	9.0	7.7	1.7	0.3
Sex:								
Male	8200	65.5	8.6	7.0	8.1	8.7	1.8	0.4
Female	9000	61.9	9.8	10.2	9.7	6.5	1.6	0.2
College Plans:								
None or under 4 yrs	7500	55.4	9.4	9.7	11.6	10.9	2.5	0.4
Complete 4 yrs	8900	72.6	9.1	7.2	5.8	4.3	0.8	0.2
Region:								
Northeast	4600	59.4	8.1	8.9	10.8	10.2	2.2	0.5
North Central	5400	61.0	10.4	8.8	9.5	8.0	2.0	0.3
South	5000	64.3	9.4	9.4	8.7	6.8	1.3	0.2
West	2800	72.7	8.2	6.9	5.7	4.9	1.4	0.2
Population Density:								
Large SMSA	5500	62.5	8.3	9.6	9.5	8.1	1.7	0.4
Other SMSA	8100	65.7	8.6	7.9	8.6	7.3	1.7	0.2
Non-SMSA	4200	60.6	10.7	9.4	9.1	8.0	1.8	0.3

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>Class of 1978</u>
<u>Lifetime use</u>				
Never	26.4	24.6	24.3	24.7
Once or twice	26.8	25.8	26.7	27.1
Occasionally but not regularly	16.4	16.9	16.4	16.2
Regularly in the past	8.6	9.2	8.8	9.1
Regularly now	21.9	23.5	23.8	22.8
	N = (10373)	(16107)	(17929)	(18461)
<u>Use in last thirty days</u>				
Not at all	63.3	61.2	61.6	63.3
Under 1 per day	9.8	10.0	9.6	9.2
1-5 per day	9.0	9.5	9.4	8.8
About 1/2 pack/day	8.3	9.3	9.1	9.0
About 1 pack/day	7.3	7.9	8.1	7.7
About 1 1/2 pack/day	1.9	1.7	1.8	1.7
2 or more pack/day	0.4	0.3	0.4	0.3
	N = (10315)	(16079)	(17902)	(18429)
<u>Probability of future use</u>				
Definitely will not	40.6	50.2	51.0	54.5
Probably will not	31.0	28.1	29.4	28.2
Probably will	27.4	20.5	18.2	16.6
Definitely will	1.0	1.2	1.4	0.6
	N = (2259)	(3262)	(3624)	(3717)

TABLE 12-7

Cigarettes: Trends in Grade in Which First Used
on a Regular Daily Basis

	<u>Percent reporting first use in each grade</u>			
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>
Sixth grade (or below)	2.0	2.4	2.7	3.5
Seventh or Eighth grade	5.7	6.7	9.1	9.3
Ninth grade	6.6	8.5	8.1	7.5
Tenth grade	7.8	6.5	6.2	5.6
Eleventh grade	5.5	6.0	4.4	^a 4.3
Twelfth grade	2.8	2.5	2.2	1.8
Never smoked daily	69.6	67.3	67.4	68.0
	N ^a = (3085)	(2901)	(5926)	(5960)

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

TABLE 12-8

Cigarettes: Grade in which First Used Daily, by Subgroups, Class of 1978

(Entries are percentages which sum horizontally)

	Number of Cases	Grade in school						Never used
		6 Or below	7/8	9	10	11	12	
All seniors	6000	3.5	9.3	7.5	5.6	4.3	1.8	68.0
Sex:								
Male	2800	4.0	8.4	7.1	5.1	4.0	1.4	70.1
Female	3100	2.9	9.9	7.8	6.2	4.3	2.3	66.7
College Plans:								
None or under 4 yrs	2500	4.7	11.5	9.6	7.1	4.9	2.3	59.8
Complete 4 yrs	3100	2.3	6.8	5.0	3.8	3.3	1.4	77.4
Region:								
Northeast	1400	3.9	12.1	9.4	6.3	4.9	1.2	62.2
North Central	2000	3.5	9.0	7.8	6.2	4.9	2.1	66.4
South	1600	3.4	8.6	7.1	4.9	3.7	2.1	70.3
West	1000	3.1	7.0	4.5	4.5	2.9	1.5	76.5
Population Density:								
Large SMSA	1800	2.7	11.1	8.3	5.5	4.7	1.6	66.0
Other SMSA	2800	3.6	8.9	6.9	5.5	3.6	1.7	69.8
Non-SMSA	1400	3.8	8.5	7.7	5.8	4.7	2.1	67.4

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

TABLE 12-9

Cigarettes: Trends in Daily Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1978)	Percent reporting first use prior to tenth grade ^a					'77-'78 change
		Class of 1975	Class of 1976	Class of 1977	Class of 1978		
All seniors	6000	14.3	17.6	19.9	20.3	+0.4	
Sex:							
Male	2800	15.8	18.4	20.0	19.5	-0.5	
Female	3100	12.6	16.5	19.6	20.6	+1.0	
College Plans:							
None or under 4 yrs	2500	NA	22.9	25.9	25.8	-0.1	
Complete 4 yrs	3100	NA	11.5	13.4	14.1	+0.7	
Region:							
Northeast	1400	18.7	21.4	23.6	25.4	+1.8	
North Central	2000	15.4	17.9	20.3	20.3	0.0	
South	1600	11.4	16.5	19.5	19.1	-0.4	
West	1000	11.2	13.6	13.8	14.6	+0.8	
Population Density:							
Large SMSA	1800	18.3	18.1	23.0	22.1	-0.9	
Other SMSA	2800	14.8	18.1	18.9	19.4	+0.5	
Non-SMSA	1400	11.2	16.9	19.0	20.0	+1.0	

NOTES: Level of significance of difference between the two most recent classes:

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

Number of cases for all previous years can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

^aThis question was asked in one form only in 1975 and 1976 and in two forms in 1977 and 1978.

FIGURE 12-1

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

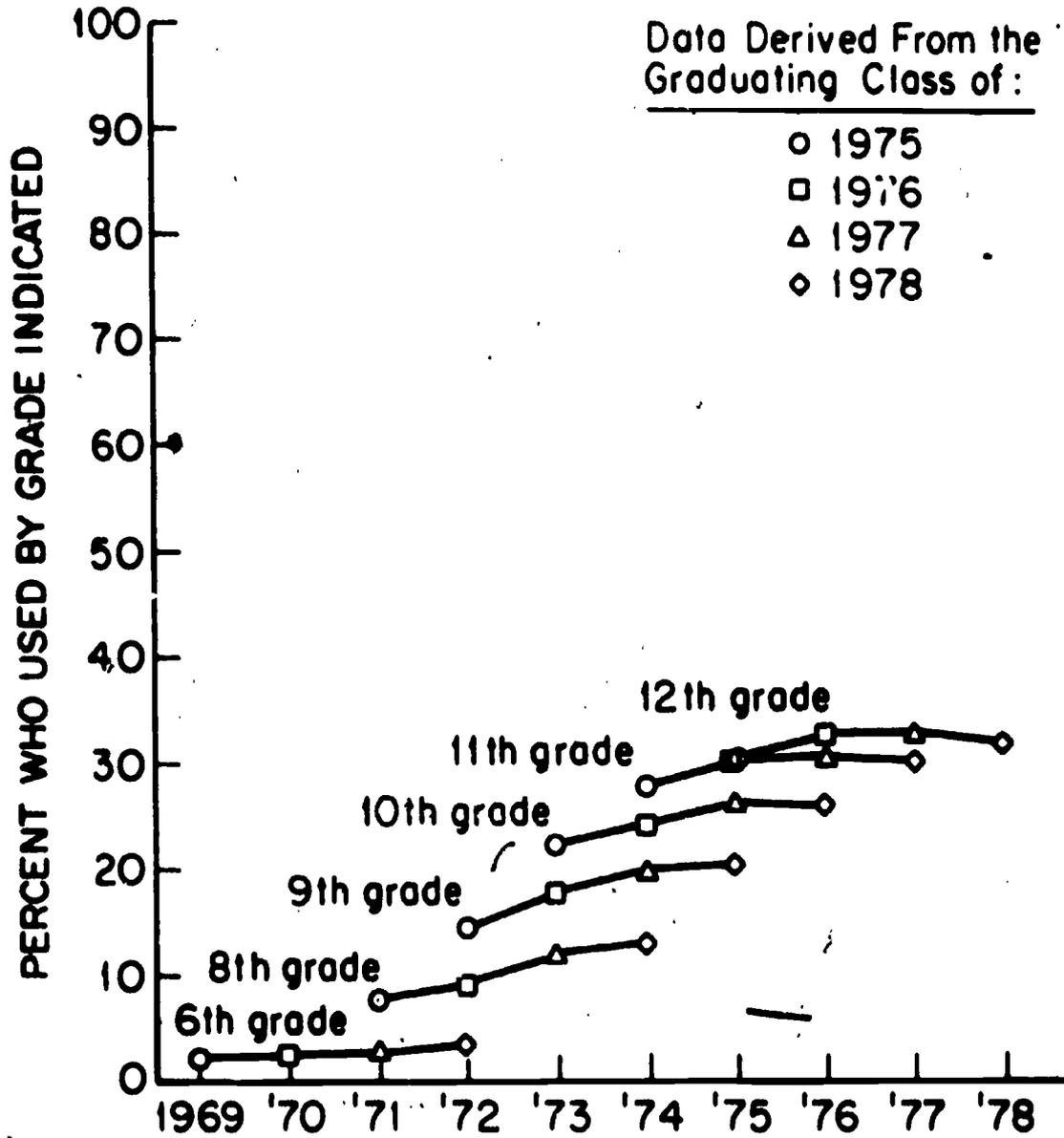
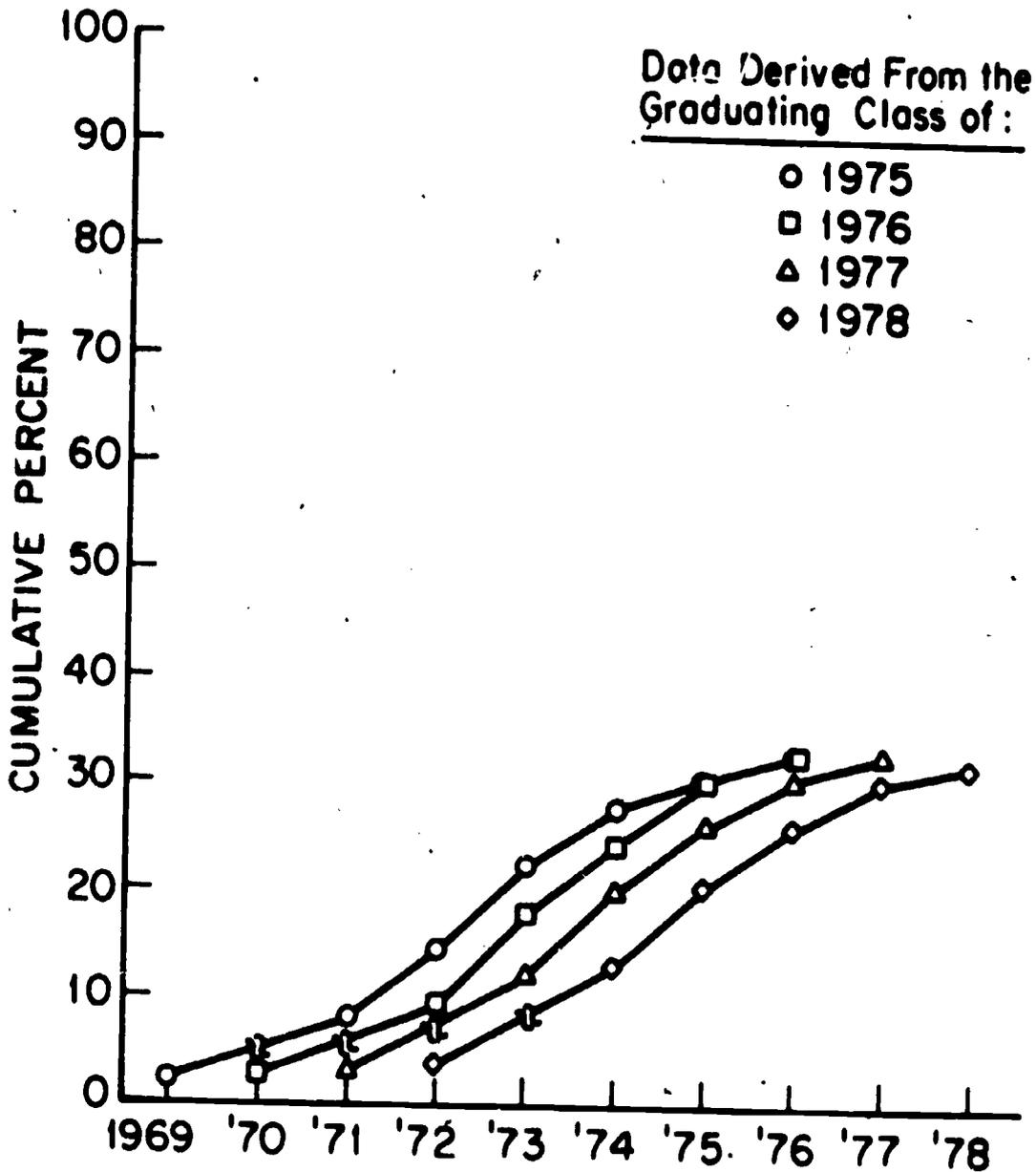


FIGURE 12-2

Cigarettes: Cumulative Lifetime Prevalence for Each
Graduating Class by Grade Level
for Use on a Daily Basis



NOTE: Each ascending curve represents the cumulative lifetime prevalence for a single graduating class, with the six sequential points demarcating (from left to right) the following grade levels: 6th, 8th, 9th, 10th, 11th, and 12th.

Chapter 13

ATTITUDES AND BELIEFS ABOUT DRUG USE

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

Of course, having an impact on public attitudes is not the same as having an impact on behavior. 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), their attitudes about behavior, particularly the attitude of the new users, may change subsequently. It seems most likely to us that both kinds of causal connections between attitudes and behaviors have been operating in recent years.

Despite these complexities in interpretation, 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 1978 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 87% of the sample feel this way about heroin--the highest proportion for

any of these drugs. The proportions attributing great risk to amphetamines, barbiturates, and cocaine are all about 68%, while 81% associate great risk with using LSD.

- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (59%), 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 35% of the sample, or about one in three. 1
- Regular use of alcohol was more explicitly defined in several questions. Very few (20%) 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, such very heavy drinking is not judged to be as harmful as the regular use of any of the illicit drugs, marihuana excepted. 1
- Compared with the above perceptions about the risks of regular use, many fewer respondents feel that the experimental or occasional user runs a "great risk" of harm. 1
- Very few think there is much risk in using marihuana occasionally (12%). 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 30% for amphetamines and barbiturates to 53% for heroin. 1
- Practically no one (3%) believes there is great risk involved in trying an alcoholic beverage once or twice. 1

Trends in Perceived Harmfulness

- For most of the illicit drugs there has been a small but consistent trend over the past three 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 35% between 1975 and 1978, 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 1

Table(s)

twice has dropped from 43% in 1975 to 33% in 1978; and the proportion seeing great risk in regular use has also dropped somewhat.

- There has been little or no change in proportions perceiving great risk in the regular use of LSD, heroin, amphetamines, or barbiturates. 1
- In dramatic contrast to all the above trends, there has been a fair-sized and steady increase in the number who think smoking cigarettes involves great risk to the user (51% in 1975 vs. 59% in 1978), a particularly encouraging finding. 1

Personal Disapproval of Drug Use

A set of questions 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. The 1975 questionnaires 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 1978

- A substantial majority of high school seniors express disapproval of regular use of each of the illicit drugs, ranging from 68% disapproving regular marijuana use up to 92% disapproving regular cocaine use (the second lowest) and 98% disapproving regular heroin use. 2
- Smoking a pack (or more) of cigarettes per day receives the disapproval of two-thirds (67%). 2
- Drinking at the rate of one or two drinks daily also receives disapproval from two-thirds of the seniors (68%)—exactly the same proportion who disapprove regular marijuana use. A curious finding is that weekend binge drinking (five or more drinks once or twice each week) is acceptable to more seniors than is moderate daily drinking. While only 56% disapprove of having five or more drinks once or twice a weekend, 68% disapprove of having one or two drinks daily. This in spite of the fact that great risk is more often attached to the weekend binge drinking (35%) than to the daily drinking (20%). One possible explanation for these seemingly inconsistent findings may stem from the fact that a greater proportion of this age group are weekend binge drinkers than regular daily drinkers. They have thus expressed attitudes accepting of their own behavior, even though they may be inconsistent with their beliefs about consequences. 2

Table(s)

- 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 great, however, for the illicit drugs other than marihuana. To illustrate, 85% disapprove of trying LSD even once or twice, and 92% disapprove of experimenting with heroin. 2
- For marihuana the rate of disapproval is substantially less for experimental use (33%) and occasional use (44%) than for regular use (68%). 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 three years in levels of disapproval for most of them. There are two exceptions: 2
- The small minority who disapprove of trying alcohol once or twice (22% in 1975) has become even smaller (16% in 1978). 2
- More important, there was a substantial decrease over the two-year interval from 1975-1977 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. Between 1977 and 1978, however, there is evidence that this softening of attitudes about marihuana may have stopped. In fact, disapproval of regular use has increased a little, though the change is not yet statistically significant. 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 1978 Regarding the Legality of UseTable(s)

- Fully 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 (50%). 3
- The majority (60%) 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., 76% in the case of amphetamines and barbiturates, 83% for heroin). 3
- For all drugs, substantially fewer students believe use in private should be illegal than express that view about public use. 3
- The difference is greatest in the case of excessive alcohol use. While 50% favor legal prohibition for public drunkenness, only 17% favor prohibiting private drunkenness. 3
- Only a small minority (25%) think the private use of marihuana should be illegal. This is less than half the percentage who think that use in public should be prohibited (60%). 3
- The differences in attitudes regarding public vs. private use are less pronounced for the other illicit drugs. A fair majority feel that use of heroin (69%) and LSD (63%) should be illegal, even when it occurs in private. A slight majority (52%) favor the prohibition of amphetamine or barbiturate use in private. 3

Trends in Attitudes about the Legality of Use

- Over the past three years there has been a decline in the proportion of seniors who favor legal prohibition of use in private of any of the illicit drugs. 3
- Although there was a similar decline between 1975 and 1977 for use of illicit drugs in public, this trend reversed slightly between 1977 and 1978. (None of these reversals, however, was large enough to be statistically significant.) 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 1978

Table(s)

- About a third of the 1978 seniors believe marihuana use should be entirely legal (33%). Nearly another third (30%) 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 15% 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
- Asked whether they thought it should be legal to sell marihuana if it were legal to use it, nearly two-thirds (66%) said yes. Of those, the great majority would permit sale only to adults, however, suggesting more conservatism on this subject than might generally be supposed. 4
- In the aggregate, high school seniors predict that they would be little affected by the legalization of the sale and use of marihuana. Just under half of the respondents (46%) say that they would not use marihuana, even if it were legal and available, and another 31% indicate they would use it about as often as they do now. Only 6% say they would use it more often than at present and only another 7% say they would try it. About 7% say they do not know how they would react. 4

Trends in Attitudes about the Legal Status of Marihuana

- Between 1975 to 1977 the proportion of seniors who favored treating marihuana use as a crime dropped 9%, from 31% to 22%. (It should be noted that during this two-year period a number of states actually enacted decriminalization statutes.) From 1977 to 1978 the proportion favoring criminal treatment remained constant at 22%. 4
- The proportion opposing the legalized sale of marihuana dropped between 1975 and 1977, but has remained quite steady since then. Interestingly, the proportion favoring sale to anyone (not just to adults) also has dropped, as has the proportion who are undecided on the issue. 4
- Over the same three years the proportion favoring legalized sale, but to adults only (assuming legalized use) has risen substantially from 37% to 54%. 4

Table(s)

- The predictions of personal marihuana use under legalization are quite similar for all four high school classes. The slight shifts being observed are mostly attributable 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" ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Try marihuana once or twice	15.1	11.4	9.5	8.1	-1.4
Smoke marihuana occasionally	18.1	15.0	13.4	12.4	-1.0
Smoke marihuana regularly	43.3	38.6	36.4	34.9	-1.5
Try LSD once or twice	49.4	45.7	43.2	42.7	-0.5
Take LSD regularly	81.4	80.8	79.1	81.1	+2.0
Try cocaine once or twice	42.6	39.1	35.6	33.2	-2.4
Take cocaine regularly	73.1	72.3	68.2	68.2	0.0
Try heroin once or twice	60.1	58.9	55.8	52.9	-2.9 s
Take heroin occasionally	75.6	75.6	71.9	71.4	-0.5
Take heroin regularly	87.2	88.6	86.1	86.6	+0.5
Try amphetamines once or twice	35.4	33.4	30.8	29.9	-0.9
Take amphetamines regularly	69.0	67.3	66.6	67.1	+0.5
Try barbiturates once or twice	34.8	32.5	31.2	31.3	+0.1
Take barbiturates regularly	69.1	67.7	68.6	68.4	-0.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.4	-0.7
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	+1.1
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	+0.2
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	-0.2
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	+0.6
	Approx. N = (2804)	(3225)	(3570)	(3770)	

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

^a 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? ^b	Percent disapproving ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Trying marihuana once or twice	47.0	38.4	33.4	33.4	0.0
Smoking marihuana occasionally	54.8	47.8	44.3	43.5	-0.8
Smoking marihuana regularly	71.9	69.5	65.5	67.5	+2.0
Trying LSD once or twice	82.8	84.6	83.9	85.4	+1.5
Taking LSD regularly	94.1	95.3	95.8	96.4	+0.6
Trying cocaine once or twice	81.3	82.4	79.1	77.0	-2.1
Taking cocaine regularly	93.3	93.9	92.1	91.9	-0.2
Trying heroin once or twice	91.5	92.6	92.5	92.0	-0.5
Taking heroin occasionally	94.8	96.0	96.0	96.4	+0.4
Taking heroin regularly	96.7	97.5	97.2	97.8	+0.6
Trying an amphetamine once or twice	74.8	75.1	74.2	74.8	+0.6
Taking amphetamines regularly	92.1	92.8	92.5	93.5	+1.0
Trying a barbiturate once or twice	77.7	81.3	81.1	82.4	+1.3
Taking barbiturates regularly	93.3	93.6	93.0	94.3	+1.3
Trying one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	15.6	0.0
Taking one or two drinks nearly every day	67.6	68.9	66.8	67.7	+0.9
Taking four or five drinks nearly every day	88.7	90.7	88.4	90.2	+1.8
Having five or more drinks once or twice each weekend	60.3	58.6	57.4	56.2	-1.2
Smoking one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	+0.6
	Approx. N = (2677)	(3234)	(3582)	(3686)	

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

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

^b 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? ^b	Percent saying "yes" ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Smoking marihuana in private	32.8	27.5	26.8	25.4	-1.4
Smoking marihuana in public places	63.1	59.1	58.7	59.5	+0.8
Taking LSD in private	67.2	65.1	63.3	62.7	-0.6
Taking LSD in public places	85.8	81.9	79.3	80.7	+1.4
Taking heroin in private	76.3	*72.4	69.2	68.8	-0.4
Taking heroin in public places	90.1	84.8	81.0	82.5	+1.5
Taking amphetamines or barbiturates in private	57.2	53.5	52.8	52.2	-0.6
Taking amphetamines or barbiturates in public places	79.6	76.1	73.7	75.8	+2.1
Getting drunk in private	14.1	15.6	18.6	17.4	-1.2
Getting drunk in public places	55.7	50.7	49.0	50.3	+1.3
Smoking cigarettes in public places	NA	NA	42.0	42.2	+0.2
	Approx. N = (2620)	(3265)	(3629)	(3783)	

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

NA indicates question not asked.

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

^b 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>	<u>Class of 1978</u>
Q. <i>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	32.9
It should be a minor violation--like a parking ticket--but not a crime	25.3	29.0	31.4	30.2
It should be a crime	30.5	25.4	21.7	22.2
Don't know	16.8	13.0	13.4	14.6
	N = (2617)	(3264)	(3622)	(3721)
Q. <i>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	21.8
Yes, but only to adults	37.1	49.8	52.1	53.6
Yes, to anyone	16.2	13.3	12.7	12.0
Don't know	18.9	13.9	12.7	12.6
	N = (2616)	(3279)	(3628)	(3719)
Q. <i>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	46.4
Try it	8.2	8.1	7.0	7.1
Use it about as often as I do now	22.7	24.7	26.8	30.9
Use it more often than I do now	6.0	7.1	7.4	6.3
Use it less than I do now	1.3	1.5	1.5	2.7
Don't know	8.5	8.1	6.6	6.7
	N = (2602)	(3272)	(3625)	(3711)

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Chapter 14

PERCEIVED ATTITUDES OF PARENTS AND FRIENDS

We noted in the preceding chapter that seniors' attitudes about some forms of drug use have been changing (just as their patterns of actual use have been changing). Such changes do not, of course, occur in a social vacuum. Drugs are a topic of considerable interest and conversation among young people; they are also a matter of much concern to parents, concern which often is strongly communicated to their children.

In this chapter we present the cross-time results for two sets of questions about parental and peer attitudes, questions which closely parallel the questions concerning the respondent's own attitudes about drug use (reported in Chapter 13, Table 13-2). The first set asks, "How do you think your parents would feel about you..." being involved in a number of different drug use experiences. The second set of questions (asked only on alternate years—1975 and 1977) is identical except that instead of asking about how "your parents would feel," the questions ask about how "your close friends would feel." The list of drug use behaviors is not as extensive as the list shown in Table 13-2; but it covers a fair sampling, with an emphasis on the more commonly used drugs.

It should be noted that this chapter deals with perceptions of parents' and friends' views, and we cannot be sure how accurate the perceptions are. But to a large extent the matter of accuracy is beside the point, since we are now focusing on the way respondents see and experience their social environment rather than the objective conditions which give rise to those perceptions.

Current Perceptions of Parental Attitudes

Table(s)

- A large majority of seniors feel that their parents would disapprove or strongly disapprove of their exhibiting any of the drug use behaviors shown. 1
- About 95% of seniors say that their parents would disapprove or strongly disapprove of their smoking marijuana regularly, trying LSD or an amphetamine even once or twice, or having four or five drinks every day. (Although the questions did not include more frequent use of LSD or amphetamines, or any use of heroin, it is obvious that if such behaviors were included in the list virtually all seniors would indicate parental disapproval.) 1
- While respondents feel that marijuana use would receive the least parental disapproval of all of the illicit drugs, even experimenting with it still is seen as a parentally sanctioned activity by the great majority of the seniors (83%), which of course means that seniors around the country feel that there 1

Table(s)

remains a massive generational difference of opinion about this drug.

- Also likely to be perceived as rating high parental disapproval (89% to 91% disapproval) are occasional marihuana use, taking one or two drinks nearly every day, and pack-a-day cigarette smoking. 1
- Slightly lower proportions of seniors (83%) think their parents would disapprove of having five or more drinks once or twice every weekend. This happens to be exactly the same percentage as say their parents would disapprove of simply experimenting with marihuana. Whether accurate or not, seniors are in essence saying that they think their parents would just as soon see them drink quite heavily once or twice a week as to see them ever lay hands on a marihuana cigarette! 1

Current Perceptions of Friends' Attitudes

- Of the drug use behaviors covered in the questions about perceptions of friends' views (1977), those showing the highest proportions of perceived disapproval are trying LSD (85% think friends would disapprove), trying an amphetamine (78%), and heavy daily drinking (79%). Presumably, if heroin were on the list it would have received the highest peer disapproval and, judging from respondents' own attitudes, barbiturates and cocaine would have been roughly as unpopular among peers as amphetamines. 2
- Close to two-thirds (60% to 65%) think their friends would disapprove if they smoked marihuana daily, smoked a pack or more of cigarettes daily, or took one or two drinks daily. 2
- Just under half feel that friends would disapprove of occasional marihuana smoking or heavy drinking on weekends, and slightly fewer (42%) feel their friends would disapprove trying marihuana once or twice. 2
- In sum, peer norms differ considerably for the various drugs and for varying degrees of involvement with those drugs, but overall they tend to be relatively conservative. The great majority of seniors have friendship circles which do not condone use of the illicit drugs other than marihuana and nearly two-thirds have close friends who they feel would disapprove of regular marihuana use or daily drinking.

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

Table(s)

- A comparison of the perceptions of friends' disapproval with perceptions of parents' disapproval shows that the ordering of drug use behaviors is much the same for the two groups (e.g., highest frequencies of perceived disapproval for trying LSD or amphetamines, lowest frequencies for trying marijuana); however, the overall proportions of seniors who expect friends to disapprove the various behaviors are much lower than the proportions who think their parents would disapprove. 1,2

- A look back at the data from the previous chapter (Table 13-2) reveals that seniors' own attitudes regarding drug use are much more in accord with those of their peers than with those of their parents. The difference between seniors' own disapproval ratings and those of their parents tend to be large, with parents seen as more conservative overall in relation to every drug, licit or illicit. The largest difference occurs in the case of marijuana experimentation, where 33% say they disapprove but 86% say their parents would. 2

- In contrast, the difference in 1977 between seniors' own disapproval (Table 13-2) and their ratings of friends' disapproval (Table 14-2) is no larger than 4% for the majority of drug use dimensions. The one area in which seniors themselves are more "liberal" than they perceive their friends to be involves trying marijuana once or twice (33% of seniors disapprove, while 42% think their friends would disapprove). But with respect to heavy drinking either on weekends or on a daily basis, seniors overall seem more conservative than they think their friends are, with about 9% more seniors themselves disapproving than think their friends would. Similarly, in the case of pack-a-day cigarette smoking, 6% more seniors disapprove than think their friends would. These differences may suggest a modest degree of "pluralistic ignorance" in the areas of heavy drinking and cigarette smoking—with seniors slightly underestimating the degree of disapproval that may exist because they have not shared their true opinions with each other. But much more impressive is the degree of similarity between seniors' own disapproval and that which they attribute to friends.

Trends in Perceptions of Parents' and Friends' Views

- Among all the drug use areas for which perceived disapproval of others was measured, the only one which showed consistent shifts over the past several years is marijuana use. At each level of use—trying once or twice, occasional use, regular use—there is some drop in perceived disapproval from 1975 1,2

to 1977 (in the case of friends) or from 1975 to 1978 (in the case of parents). We know from the findings in Chapter 13 that respondents are here correctly reporting shifts in the attitudes of their peer groups—that is, that acceptance of marihuana is increasing in that age group. There is little reason to suppose they are less accurate in reporting a shift among parents. Therefore, it appears that the social norms regarding marihuana use to which American adolescents are directly exposed have been changing.

- Perceived parental and peer norms regarding most other drugs have shown either no change, or patterns of change which are not judged to be sufficiently consistent to be treated as trends. 1
- The one exception is cigarette smoking. More students in 1977 than in 1975 (60% vs. 55%) report that if they smoked on a regular (pack-a-day) basis their friends would disapprove. This shift in perceptions of friends' disapproval may represent a convergence with reality—a reduction in pluralistic ignorance—because a consistent two-thirds of seniors since 1975 have reported that they personally disapprove of pack-a-day cigarette smoking. 1

TABLE 14-1
Trends in Parental Disapproval of Drug Use

Q. How do you think your parents would feel about you...	Percent disapproving ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Trying marihuana once or twice	90.8	87.4	85.8	83.2	-2.6 s
Smoking marihuana occasionally	95.6	93.0	92.5	90.8	-1.7
Smoking marihuana regularly	98.1	96.3	96.5	95.6	-0.9
Trying LSD once or twice	99.0	97.4	98.1	97.5	-0.6
Trying an amphetamine once or twice	98.0	97.1	97.2	96.7	-0.5
Taking one or two drinks nearly every day	89.5	90.0	92.2	88.9	-3.3 sss
Taking four or five drinks every day	97.2	96.5	96.5	96.3	-0.2
Having five or more drinks once or twice every weekend	85.3	85.9	86.5	82.6	-3.9 ss
Smoking one or more packs of cigarettes per day	88.5	87.6	89.2	88.7	-0.5
	Approx. N = (2546)	(2807)	(3014)	(3054)	

NOTE: NA indicates question not asked.

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

TABLE 14-2

Trends in Proportion of Friends Disapproving of Drug Use

Q. How do you think your close friends feel (or would feel) about you...	Percent Saying Friends Disapprove ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Trying marihuana once or twice	44.8	NA	42.3	NA	NA
Smoking marihuana occasionally	54.0	NA	48.2	NA	NA
Smoking marihuana regularly	70.4	NA	64.5	NA	NA
Trying LSD once or twice	83.6	NA	84.6	NA	NA
Trying an amphetamine once or twice	76.6	NA	78.1	NA	NA
Taking one or two drinks nearly every day	59.4	NA	63.2	NA	NA
Taking four or five drinks every day	79.9	NA	78.8	NA	NA
Having five or more drinks once or twice every weekend	50.3	NA	48.7	NA	NA
Smoking one or more packs of cigarettes per day	55.3	NA	60.0	NA	NA
	Approx. N = (2488)	(NA)	(2971)	(NA)	

NOTE: NA indicates question not asked.

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

Chapter 15

EXPOSURE TO DRUG USE BY FRIENDS AND OTHERS

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

Given the potential importance of exposure to drug use by others, we felt it would be useful to monitor seniors' association with others taking drugs, as well as seniors' perceptions about the extent to which their friends use drugs. Two sets of questions, each covering all or nearly all of the categories of drug use treated in earlier chapters, asked seniors to indicate (a) how often during the past twelve months they were around people taking each of the drugs to get high or for "kicks," and (b) how many of their friends use each of the drugs. Although the present report does not include correlational analyses, it may be worth noting that the responses to these two questions are highly correlated with the respondents' own drug use; thus, for example, seniors who have recently used marihuana are much more likely to report that they have been around others getting high on marihuana, and that most of their friends use it.

Exposure to Drug Use in 1978

Table(s)

- A comparison of responses about friends' use, and about being around people in the last 12 months who were using various drugs to get high, reveals a high degree of correspondence between these two indicators of exposure. For each drug, the proportion of respondents saying "none" of their friends use it is just about equal to the proportion who say that during the last 12 months they have not been around anyone who was using that drug to get high. Similarly, the proportion saying they are "often" around people getting high on a given drug is just about the same as the proportion reporting that "most" or "all" of their friends use that drug.
- There is also a very close match (in all cases less than 5% difference) between the percentages of respondents who have reported using a drug themselves during the past month, and the percentages who say that most or all of their friends use the drug. Since it is presumably less threatening to report on friends' illicit drug use than on one's own use, we take this high level of correspondence between friends' use and personal use as reassuring evidence of the construct validity of our self-reported use measures.

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- Given that reports of exposure and friends' use closely parallel the figures on seniors' own use, it comes as no surprise that the highest levels of exposure involve alcohol (a majority "often" around people using it to get high) and marihuana (39% "often" and 25% "occasionally" around people using it to get high). 1,3
- What may come as a surprise is that fully 30% of all seniors say that most or all of their friends get drunk at least once a week! 3,4,5
- For each of the drugs other than marihuana or alcohol, fewer than one in ten report they are "often" exposed to people using it to get high, fewer than one in five report that it occurs as much as "occasionally," and a majority (usually a large majority) report no such exposure in the previous year. Thus, 82% had not been around people using LSD or any narcotics, 74% had not been around people using barbiturates, and so on.
- The lowest levels of reported exposure and friends' use, of course, involve heroin. Only about 8% report any exposure at all during the past year to people taking heroin and only about 14% believe that any of their friends use it (with only 1% saying that most or all of their friends use it). Since fewer than 2% of our sample admitted ever using heroin, and fewer than 1% within the past year, it is not surprising that the percentages reporting exposure are so low. If anything, it may be surprising that they are not even lower. The fact that fully 14% of seniors estimate that at least a few of their friends take heroin prompts a number of speculations. (a) It may be that the very rare heroin users among seniors have more friends than average. We consider this possible, but unlikely. (b) More likely is that, given the highly illicit nature of heroin, its use is more widely broadcast or rumored among acquaintances than use of other drugs. Thus proportionately more respondents may say they have "a friend" who uses. (c) It also may be that some of our respondents are reporting about heroin-using friends who are not in high school. (d) Further, heroin use among high school students may be somewhat more frequent than our self-report data suggest (a caution stated clearly in Chapter 6). (e) Finally, it is possible that a considerable portion of those seniors who estimate that "a few" of their friends use heroin are actually mistaken in their assessments of their friends' drug use. 1,3

Subgroup Differences in Friends' Use

- Subgroup differences for the Class of 1978 are displayed for four of the most frequent drug use behavior categories—smoking marihuana, drinking alcoholic beverages, getting drunk at least once a week, and smoking cigarettes. These subgroup data, like the data for the total sample, 5

generally "track" very closely subgroup differences in actual recent use of the drugs in question—indeed, it is rare that any subgroup shows a difference as large as 5% between the proportion who report personal use during the last thirty days and the proportion reporting that most or all friends use (see Tables 2-4, 11-4, and 12-3 for comparison data).

- The only important exceptions to the above generalization involve the comparisons of males and females. Insofar as marihuana and alcohol use are concerned, the male-female differences in actual use are distinctly larger than the male-female differences in reports about friends' use. To take one example, 43% of males compared to 31% of females report use of marihuana during the past thirty days (a 12% difference), whereas 37% of males versus 33% of females estimate that most or all of their friends smoke marihuana (a difference of only 4%). Another example: 38% of males, versus only 19% of females, report taking five or more drinks in a row on at least two occasions during the past two weeks; by way of contrast, Table 15-5 shows that 33% of males and 28% of females estimate that most or all of their friends get drunk at least once a week—a difference far smaller than the two-to-one ratio for actual heavy drinking.

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The fact that male-female differences are smaller when describing friends' use rather than their own use probably reflects the fact that most females have some male friends (who, on the average are more likely to drink and use marihuana) and conversely, most males have some female friends (who are less likely to drink and use marihuana). In other words, the friendship patterns are such that sex differences are somewhat blurred. (Interestingly, there does not seem to be a similar blurring of the distinctions between those who do and do not plan four years of college, suggesting that there may be a relatively limited amount of cross-group friendship linkages.)

- Male-female comparisons in terms of friends' use of cigarettes follows a different pattern than the one described above for alcohol and marihuana. In describing themselves females are slightly more likely than males to say they are regular smokers (24% versus 21%) or as occasional smokers (17% versus 15%), although males are more likely to say they smoke a pack a day or more (10.9% versus 8.3% for females—see Table 12-5). Given these mixed findings and small differences, and given the blurring of distinctions noted above for males and females reporting friends' use of marihuana and alcohol, we might have expected little or no difference between the sexes in their reports about friends' use of cigarettes. Instead, we find a 7% difference, with 35% of females reporting that most or all of their friends smoke, in contrast with only 28% of males who say so. A number of explanations for this phenomenon are plausible. One, for example, would be that males, because of their more frequent

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involvement in sports, develop more heterogeneous friendship groupings in terms of college-bound vs. noncollege-bound students. Therefore, fewer of them are in homogeneous groupings of noncollege-bound students—the ones most likely to be comprised mostly of smokers.

Recent Trends in Exposure to Drug Use

- During the two-year interval from 1976 to 1978, seniors' reports of exposure to marihuana use increased in just about the same proportion as percentages on actual use. Those saying most or all of their friends smoke marihuana rose from 31% to 35%, while the percentage of seniors reporting that they themselves had used marihuana in the last thirty days rose from 32% to 37% (see Table 2.4). The proportions saying that they often were around people getting high on marihuana rose similarly from 33% in 1976 to 39% in 1978. 2,4
- The other drug reflecting a consistent increase in reported exposure from 1976 to 1978 is cocaine. (As noted in Chapter 5, seniors' own use also rose during this time interval.) It remains the case that very few seniors have much exposure; but the proportion saying they had no exposure to people getting high on cocaine dropped from 77% to 70% between 1976 and 1978. Similarly, the estimates that no friends use the drug dropped from 71% to 67%. 2,4
- The data also show some decrease in exposure to barbiturate use—about 5% more seniors in 1978 than in 1976 (74% vs. 69%) reported that they had no exposure in the previous year. Also, there is a small decline in exposure to LSD use between 1976 and 1978, paralleling the decline in actual use. 2,4
- The other drugs showed essentially steady rates of reported exposure from 1976 to 1978. 2,4

TABLE 15-1
Exposure to Drug Use, Class of 1978
 (Approximate N = 3682)

Q. *During the LAST 12 MONTHS, how often have you been around people who were taking each of the following to get high or for "kicks"?*

	Percent saying . . .			
	<u>Not at all</u>	<u>Once or twice</u>	<u>Occasionally</u>	<u>Often</u>
Marihuana (pot, grass) or hashish	17.3	18.4	25.3	39.0
LSD	81.9	11.1	5.2	1.8
Other psychedelics (mescaline, peyote, PCP, etc.)	76.7	13.4	7.0	2.9
Cocaine ("coke")	69.8	16.3	9.3	4.6
Heroin (smack, horse)	91.8	5.5	1.9	0.9
Other narcotics (methadone, opium, codeine, paregoric, etc.)	81.8	11.7	4.5	2.0
Amphetamines (uppers, pep pills, bennies, speed)	60.9	18.8	13.5	6.7
Barbiturates (downers, goofballs, reds, yellows, etc.)	73.5	14.6	8.5	3.4
Tranquilizers (Librium, Valium, Miltown)	67.5	19.1	8.6	4.9
Alcoholic beverages (beer, wine, liquor)	5.5	9.0	24.8	60.8

TABLE 15-2

Trends in Exposure to Drug Use

Q. During the LAST 12 MONTHS how often have you been around people who were taking each of the following to get high or for "kicks"?

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	<u>'77-'78 change</u>
Marihuana					
% saying not at all	NA	20.5	19.0	17.3	-1.7
% saying often	NA	32.5	37.0	39.0	+2.0
LSD					
% saying not at all	NA	78.8	80.0	81.9	+1.9
% saying often	NA	2.2	2.0	1.8	-0.2
Other psychedelics					
% saying not at all	NA	76.5	76.7	76.7	0.0
% saying often	NA	3.1	3.2	2.9	-0.3
Cocaine					
% saying not at all	NA	77.0	73.4	69.8	-3.6 <i>ss</i>
% saying often	NA	3.0	3.7	4.6	+0.9
Heroin					
% saying not at all	NA	91.4	90.3	91.8	+1.5
% saying often	NA	0.8	1.1	0.9	-0.2
Other narcotics					
% saying not at all	NA	81.9	81.3	81.8	+0.5
% saying often	NA	1.8	2.4	2.0	-0.4
Amphetamines					
% saying not at all	NA	59.6	60.3	60.9	+0.6
% saying often	NA	6.8	7.9	6.7	-1.2
Barbiturates					
% saying not at all	NA	69.0	70.0	73.5	+3.5 <i>ss</i>
% saying often	NA	4.5	5.0	3.4	-1.6 <i>ss</i>
Tranquilizers					
% saying not at all	NA	67.7	66.0	67.5	+1.5
% saying often	NA	5.5	6.3	4.9	-1.4 <i>s</i>
Alcoholic beverages					
% saying not at all	NA	6.0	5.6	5.5	-0.1
% saying often	NA	57.1	60.8	60.8	0.0
	Approx. N = (NA)	(3249)	(3579)	(3682)	

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

NA indicates data not available.

TABLE 15-3
Friends' Use of Drugs, Class of 1978
 (Approximate N = 3297)

Q. <i>How many of your friends would you estimate...</i>	Percent saying . . .				
	<u>None</u>	<u>A Few</u>	<u>Some</u>	<u>Most</u>	<u>All</u>
Smoke marihuana	13.9	25.3	25.6	27.8	7.4
Use inhalants	80.0	16.0	2.9	0.7	0.4
Take LSD	70.1	20.9	7.1	1.3	0.6
Take other psychedelics	70.8	20.5	6.8	1.4	0.6
Take cocaine	66.8	21.8	7.4	2.9	1.1
Take heroin	85.7	11.1	2.3	0.4	0.6
Take other narcotics	76.8	17.4	4.3	0.9	0.5
Take amphetamines	59.3	25.9	10.0	3.8	0.9
Take barbiturates	67.5	22.9	7.3	1.8	0.6
Take quaaludes	73.1	18.1	6.6	1.6	0.6
Take tranquilizers	65.2	25.9	7.2	1.2	0.5
Drink alcoholic beverages	5.1	10.6	15.4	42.0	26.9
Get drunk at least once a week	18.0	25.5	26.2	21.7	8.5
Smoke cigarettes	6.9	27.8	33.1	29.3	2.9

TABLE 15-4
Trends in Friends' Use of Drugs

Q. How many of your friends would you estimate...	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Smoke marihuana					
% saying none	NA	17.1	14.1	13.9	-0.2
% saying most or all	NA	30.6	32.3	35.3	+3.0 e
Using inhalants					
% saying none	NA	81.4	81.1	80.0	-1.1
% saying most or all	NA	1.1	1.0	1.1	+0.1
Take LSD					
% saying none	NA	69.4	68.1	70.1	+2.0
% saying most or all	NA	2.8	3.0	2.0	-1.0 e
Take other psychedelics					
% saying none	NA	69.7	68.6	70.8	+2.2
% saying most or all	NA	3.0	2.8	2.0	-0.8
Take cocaine					
% saying none	NA	71.2	69.9	66.8	-3.1 e
% saying most or all	NA	3.2	3.6	4.0	+0.4
Take heroin					
% saying none	NA	86.4	87.1	85.7	-1.4
% saying most or all	NA	0.8	0.7	0.9	+0.2
Take other narcotics					
% saying none	NA	75.9	76.3	76.8	+0.5
% saying most or all	NA	2.2	1.7	1.4	-0.3
Take amphetamines					
% saying none	NA	57.8	58.7	59.3	+0.6
% saying most or all	NA	5.6	4.1	4.7	+0.6
Take barbiturates					
% saying none	NA	63.7	65.3	67.5	+2.2
% saying most or all	NA	3.5	3.0	2.3	-0.7
Take quaaludes					
% saying none	NA	73.0	71.7	73.0	+1.3
% saying most or all	NA	2.8	2.9	2.2	-0.7

(Table continued on next page)

TABLE 15-4 (cont)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1978</u>	<u>'77-'78 change</u>
Take tranquilizers					
% saying none	NA	63.7	62.2	65.2	+3.0 <i>s</i>
% saying most or all	NA	3.1	2.7	1.8	-0.9 <i>s</i>
Drink alcoholic beverages					
% saying none	NA	4.9	5.6	5.1	-0.5
% saying most or all	NA	64.7	66.2	68.9	+2.7
Get drunk at least once a week					
% saying none	NA	19.3	19.0	18.0	-1.0
% saying most or all	NA	26.6	27.6	30.2	+2.6
Smoke cigarettes					
% saying none	NA	6.3	6.3	6.9	+0.6
% saying most or all	NA	36.7	33.9	32.2	-1.7
	Approx. N = (2640)	(2929)	(3184)	(3247)	

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

NA indicates data not available.

TABLE 15-5
Friends' Use of Selected Drugs by Subgroups, Class of 1978

	<u>Number of Cases</u>	<u>Percent saying most or all^a of friends...</u>			
		<u>Smoke Mari- huana</u>	<u>Drink Alcoholic Beverages</u>	<u>Get drunk at least once a week</u>	<u>Smoke Ciga- rettes</u>
All seniors	3276	35.3	68.9	30.2	32.2
Sex:					
Male	1490	36.9	71.2	32.7	28.3
Female	1712	33.3	66.5	27.8	35.2
College Plans:					
None or under 4 yrs	1406	39.4	68.9	34.8	41.6
Complete 4 yrs	1733	31.0	69.2	25.9	23.2
Region:					
Northeast	786	48.7	74.1	35.4	37.8
North Central	1032	34.3	75.9	31.6	33.2
South	990	28.9	63.8	27.4	32.3
West	468	30.2	56.3	25.2	19.8
Population Density:					
Large SMSA	967	44.1	71.5	31.0	36.6
Other SMSA	1444	32.6	67.6	28.4	28.0
Non-SMSA	865	32.2	68.5	32.1	34.5

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

^a Answer alternatives were: (1) None, (2) A few, (3) Some, (4) Most, and (5) All. Percentages are shown for categories (4) and (5) combined.

Chapter 16

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 high level of face validity—particularly if it is the subjective reality of "perceived availability" which is purported to be measured. It also seems quite reasonable to us to assume that perceived availability tracks actual availability, 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 1978

Total Sample

Table(s)

- 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. However, even the availability data from recent users correlate highly with the overall prevalence levels for the drugs.

Table(s)

- Marihuana appears to be almost universally available to high school seniors; 88% reported that they think it would be "very easy" to "fairly easy" for them to get—almost 30% 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 64%, amphetamines to 59%, and barbiturates to 51%. 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 26% to 38%). 1
- Heroin is seen by the fewest seniors (16%) 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 important variation by drug class, however. Most (from 75% to 98%) of the users of marihuana, psychotherapeutic drugs (amphetamines, barbiturates, and tranquilizers), cocaine, or hallucinogens other than LSD feel they could get those same drugs fairly easily. Only about half of those who used LSD, heroin, or other opiates in the past year feel it would be fairly easy for them to get those drugs again. 2

Trends in Perceived Availability

- Cocaine showed an increase of about 5% between 1977 and 1978 in easy availability as perceived by all respondents, while there was an 11% increase in the proportion of recent users who perceived cocaine as easy to get. Both of these changes are statistically significant and, of course, parallel the increase in actual prevalence of cocaine use. 1,2
- Marihuana availability has remained almost perfectly steady across the last three high school classes (at between 87% to 88% of the entire sample). 1
- For all of the other illicitly used drugs, the proportions of the total sample reporting easy access have declined considerably across the four high school classes. However, most of that

drop occurred between 1975 and 1976; and over the last three graduating classes, availability of four of these drugs has been relatively constant—amphetamines, tranquilizers, opiates other than heroin, and hallucinogens other than LSD.

- Over the same three year interval there has been a steady and considerable drop in perceived availability of heroin, with perceived easy access dropping from 24% to 16% among all respondents and from 57% to 47% among recent users.
- The greatest overall decrement in perceived availability occurs for hallucinogens, i.e., for LSD and for other psychedelics. Interestingly, the drop in proportion of the total sample reporting easy access to both of these classes of hallucinogens was the same (i.e., a drop of 14% between 1975 and 1978) with the result that they both are still seen as about equally available. However, over the same interval the data from recent LSD users shows a dramatic drop in LSD availability, while the other-psychedelic users show rather little net decline in the availability of that class of drugs.

1,2

TABLE 16-1
Trends in Reported Availability of Drugs

Q. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percent saying drug would be "Fairly easy" or "Very easy" for them to get ^a				
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Marihuana	87.8	87.4	87.9	87.8	-0.1
LSD	46.2	37.4	34.5	32.2	-2.3
Some other psychedelic	47.8	35.7	33.8	33.8	0.0
Cocaine	37.0	34.0	33.0	37.8	+4.8 <i>ss</i>
Heroin	24.2	18.4	17.9	16.4	-1.5
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	-1.7
Amphetamines	67.8	61.8	58.1	58.5	+0.4
Barbiturates	60.0	54.4	52.4	50.6	-1.8
Tranquilizers	71.8	65.5	64.9	64.3	-0.6
	Approx. N = (2627)	(3163)	(3562)	(3598)	

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

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

TABLE 16-2

Trends in Perceived Availability of Each Drug as Reported
by Recent Users of that Drug^a

Q. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Number of Cases (Class of 1978)	Percent saying drug would be "Fairly easy" or "Very easy" for them to get ^b				
		Class of 1975	Class of 1976	Class of 1977	Class of 1978	'77-'78 change
Marihuana	1847	97.7	98.6	98.2	97.8	-0.4
LSD	239	77.1	66.4	55.6	52.6	-3.0
Some other psychedelic	268	79.0	71.1	68.3	74.9	+6.6
Cocaine	331	72.2	69.8	68.9	80.2	+11.3 <i>ss</i>
Heroin	28	56.5	66.9	53.0	47.0	-6.0
Some other narcotic (including methadone)	233	67.4	56.0	56.2	56.7	+0.5
Amphetamines	585	92.5	86.4	84.7	87.6	+2.9
Barbiturates	290	81.9	82.9	79.0	83.0	+4.0
Tranquilizers	400	89.3	83.0	84.4	84.0	-0.4

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

^a Figures are based on all respondents who report use of the drug in the prior twelve months.

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

IV. APPENDICES

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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 judgment. In the following sections we discuss and offer our judgments on each, elaborating on the facts which underlie 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 subsequent years, participation rate for the new half samples of schools have ranged from 66% to 80%. Half of the sample in each of these years consisted of repeat schools, schools which had participated in the previous year. The rates of repeat (i.e., second-year) participation range from 95% to 100%. Any schools which dropped out were replaced with substitute schools.

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 is required from some official in addition to the principal of the selected school. In some cases this is the superintendent or, particularly in the larger systems, an official whose approval is required for all research conducted in the system.

Complicating the process is 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 entail 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 involves an initial telephone contact with the principal of a selected school 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 the school has already participated in 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 adverse 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 the principal favors participation. The reasons given for refusal at these higher levels tend to be the same 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. Given the obstacles of the type listed above which arise from time to time in particular schools, it is not surprising that some decline to participate each year.

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

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 increased conservatism of school administrators concerning research (because of the new, poorly understood privacy laws), we feel that the present participation rates are about as good as can be managed in a survey of this type.

Effects of Nonparticipation. It is reasonable to ask whether nonparticipation of some of the originally sampled schools is likely to have 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, only between one-fifth and one-third of the schools are substitutes during any given year. With respect to the second factor, the substitutes are chosen to be similar as possible to the original school. There is no particular reason to expect that the students in schools which refuse are greatly different from those in schools which agree to participate. The reasons for school nonparticipation are based primarily on general policy issues and/or on somewhat happenstance events which are not likely to relate systematically to student drug use. In sum, the school refusal rate is not excessively high compared with other school-based studies, and the substitute schools seem likely to be quite similar to the refusal schools.

There is one additional point to be considered. Insofar as monitoring change is concerned, the effects of school nonparticipation should be minimal. Any systematic biases that might emerge (say, underrepresenting politically 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 refusal. 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

We are now obtaining useable questionnaires from over 80% of the seniors in our target sample (a figure which, incidentally, compares favorably with most national household surveys these days). While a very few (under 2%) explicitly refuse to complete the questionnaires, most of the non-respondents are absent from school on the day of the administration. (Absentee rates tend to be higher than average in the last third of senior year due to several factors, particularly a higher frequency of extracurricular activities.) 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. Since students with higher absentee rates tend to have higher than average rates of drug use (Kandel, 1975), missing them is likely to have some effect on drug use estimates.

It is possible to use the absenteeism records of actual respondents in adjusting drug use estimates to correct for absenteeism. 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 on any given day, which can be done by asking how many days during the past 20 days (for example) 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 thus far elected not to incorporate the correction into the data we report. There are several reasons for this decision. First, after we made such adjustments to the drug usage rates using the data on absenteeism, we 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 created by this 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 what they say about their use of drugs. While there is no direct, objective validation of our self-report measures, a good deal of inferential evidence exists to support their validity:

1. A considerable proportion of respondents, over 60%, 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, 1978). 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 runs 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; Abelson, Fishburne, & Cisin, 1978; and O'Donnell et al., 1976).
7. Methodological studies have utilized various methods to determine the validity of self-report data: urinalysis for drug use; polygraph verification; official police, court, and treatment agency documents; and reports by peers, parents, and teachers. Generally, the findings from these studies have been encouraging (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, 1977a.)

Appendix B

ESTIMATION OF SAMPLING ERRORS

List of Statistical Tables

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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 59.2% of the seniors sampled from the class of 1978 reported using marihuana at least once in their lifetime. The table also lists a lower limit of 57.2% and an upper limit of 61.2%. 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 56.5% to 61.8%) 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 1977 and 1978 in percentages ever using marihuana is 2.8% as shown in Table 1-3, and the 95% confidence limits for that difference are from 0.7% to 4.9%. In other words, the chances are 95 out of 100 that the true population difference between the classes of 1977 and 1978 is at least as large as 0.7% but no larger than 4.9%. The 99% confidence interval would be from -0.8% to 6.4%. Since the lower value for the 95% confidence interval is larger than zero, we can say that the difference between the percentage for 1977 and that for 1978 is "significant at (or beyond) the .05 level," meaning that the chances are less than 5 in 100 that the true values for 1977 and 1978 do not differ (by at least some amount) in the direction shown. (It happens that this difference falls slightly short of significance at the .01 level, because the lower limit is less than zero.)

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.

* 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 cases of comparisons between males and females or between college bound and noncollege-bound seniors, the design effects are still smaller. 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. In a comparison of males and females, for example, their characteristics, within each school, are generally more alike than they would be if we had chosen all the males from that school but all the females from a separate, independently chosen school. 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 1975 and 1976), 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 1975 and 1976 samples are not independent; on the contrary, there is a considerable degree of covariance between them. A similar level of covariance occurs between any pair of adjacent-year samples (e.g., 1977 and 1978), because about half of the schools were included in both samples.

In order to take account of these reduced design effects for trend comparisons across adjacent years, the tables of "effective Ns" include entries specifically designated for analyses of "one-year trends".

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 marijuana, alcohol, and cigarettes. Table B-10 deals with various additional variables. (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.)

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 all subsequent years) 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 "1-yr 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 "1-yr Trend" is used.

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) ^a 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 sub- group, drug, and period of usage)		
-- Comparison of two adjacent classes: e.g., 1977 vs. 1978	1-yr Trend	Table B-12
-- Comparison of non-adjacent classes: e.g., 1975 vs. 1978	Standard ^b	Table B-12
-- Any other difference between two subgroups	Standard	Table B-12

^aThe 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.

^bThe 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>1977 and All Subsequent Years</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	4100	4900	6000	5500	6500	7900	5800	7000	8500
1-yr Trend	6000	6800	7800	7900	9000	10400	8500	9600	11100
Sex:									
Male									
Standard	2600	3000	3400	3600	4100	4700	3600	4200	4900
1-yr Trend	3400	3800	4200	4700	5200	5800	4900	5300	5900
Comparison	3700	4000	4400	5100	5600	6100	5300	5700	6200
Female									
Standard	2800	3300	3800	3500	4000	4700	4000	4600	5300
1-yr Trend	3800	4100	4600	4700	5100	5700	5300	5800	6500
Comparison	4100	4400	4800	5100	5500	6000	5800	6300	6800
College Plans:									
None or under 4 yrs									
Standard	NA	NA	NA	3200	3700	4200	3300	3800	4400
1-yr Trend	NA	NA	NA	4200	4700	5200	4400	4900	5400
Comparison	NA	NA	NA	4200	4700	5200	4400	4900	5400
Complete 4 yrs									
Standard	NA	NA	NA	3500	4100	4700	4000	4500	5300
1-yr Trend	NA	NA	NA	4700	5200	5700	5300	5800	6400
Comparison	NA	NA	NA	4700	5200	5700	5300	5800	6400
Region:									
Northeast									
Standard	990	1200	1400	1300	1600	1900	1500	1800	2200
1-yr Trend	1400	1600	1900	1900	2200	2500	2200	2500	2900
North Central									
Standard	1300	1500	1900	1700	2000	2400	1800	2100	2600
1-yr Trend	1900	2100	2500	2400	2800	3200	2600	2900	3400
South									
Standard	1100	1300	1600	1400	1600	2000	1600	2000	2400
1-yr Trend	1600	1800	2100	2000	2300	2600	2400	2700	3100
West									
Standard	650	800	980	950	1200	1400	790	970	1200
1-yr Trend	1100	1200	1400	1600	1800	2100	1300	1500	1700
Population Density:									
Large SMSA									
Standard	1300	1500	1800	1700	2000	2500	1800	2100	2600
1-yr Trend	1800	2100	2400	2500	2800	3200	2800	3000	3400
Other SMSA									
Standard	1900	2300	2700	2400	2900	3600	2600	3200	3900
1-yr Trend	2700	3100	3800	3800	4000	4600	3900	4400	5000
Non-SMSA									
Standard	1000	1200	1400	1300	1600	1900	1400	1600	2000
1-yr Trend	1400	1600	1900	1900	2200	2500	2000	2300	2600

TABLE B-3

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

	<u>Class of 1975</u>			<u>Class of 1976</u>			<u>1977 and All Subsequent Years</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	2200	2900	3800	2900	3800	5000	3100	4000	5300
1-yr Trend	3800	4600	5600	5000	6000	7400	5300	6400	7900
Sex:									
Male									
Standard	1600	2000	2500	2300	2800	3400	2300	2800	3500
1-yr Trend	2500	2900	3300	3400	4000	4600	3500	4100	4700
Comparison	2800	3200	3600	3900	4400	5000	4000	4500	5100
Female									
Standard	1800	2200	2700	2200	2700	3400	2500	3100	3800
1-yr Trend	2700	3200	3700	3400	3900	4600	3800	4500	5200
Comparison	3100	3500	4000	3800	4400	4900	4300	4900	5600
College Plans:									
None or under 4 yrs									
Standard	NA	NA	NA	2000	2500	3100	2100	2600	3200
1-yr Trend	NA	NA	NA	3100	3600	4100	3200	3700	4300
Comparison	NA	NA	NA	3100	3600	4100	3200	3700	4300
Complete 4 yrs									
Standard	NA	NA	NA	2300	2800	3400	2500	3100	3800
1-yr Trend	NA	NA	NA	3400	3900	4600	3800	4400	5100
Comparison	NA	NA	NA	3400	3900	4600	3800	4400	5100
Region:									
Northeast									
Standard	530	680	900	710	920	1200	810	1000	1400
1-yr Trend	900	1100	1300	1200	1500	1800	1400	1700	2000
North Central									
Standard	700	900	1200	900	1200	1500	950	1200	1600
1-yr Trend	1200	1400	1800	1500	1800	2300	1600	2000	2400
South									
Standard	600	760	1000	740	950	1200	880	1100	1500
1-yr Trend	1000	1200	1500	1200	1500	1900	1500	1800	2200
West									
Standard	300	400	550	450	590	800	370	490	670
1-yr Trend	690	830	1000	1000	1200	1500	840	1000	1200
Population Density:									
Large SMSA									
Standard	680	870	1100	910	1200	1500	970	1200	1600
1-yr Trend	1100	1400	1700	1500	1900	2300	1600	2000	2400
Other SMSA									
Standard	1000	1300	1700	1300	1700	2200	1400	1800	2400
1-yr Trend	1700	2100	2600	2200	2700	3300	2400	2900	3600
Non-SMSA									
Standard	540	690	910	720	920	1200	740	950	1300
1-yr Trend	910	1100	1300	1200	1500	1800	1300	1500	1900

TABLE B-4

"Effective N" Values for Percent Using Marihuana

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>1977 and All Subsequent Years</u>
All seniors			
Standard	1600	2100	2300
1-yr Trend	2900	3900	4100
Sex:			
Male			
Standard	1500	2000	2100
1-yr Trend	2300	3100	3200
Comparison	2600	3600	3600
Female			
Standard	1100	1380	1600
1-yr Trend	1880	2300	2700
Comparison	2200	2700	3100
College Plans:			
None or under 4 yrs			
Standard	NA	1800	1900
1-yr Trend	NA	2800	2900
Comparison	NA	2800	2900
Complete 4 yrs			
Standard	NA	1400	1500
1-yr Trend	NA	2300	2800
Comparison	NA	2300	2600
Region:			
Northeast			
Standard	450	600	680
1-yr Trend	790	1100	1200
North Central			
Standard	580	750	800
1-yr Trend	1000	1300	1400
South			
Standard	500	620	740
1-yr Trend	880	1100	1300
West			
Standard	120	170	140
1-yr Trend	600	880	730
Population Density:			
Large SMSA			
Standard	660	900	950
1-yr Trend	1100	1500	1600
Other SMSA			
Standard	500	650	700
1-yr Trend	1700	2200	2400
Non-SMSA			
Standard	530	700	730
1-yr Trend	900	1200	1200

TABLE B-5

"Effective N" Values for Percent Using Inhalants

	<u>Class of 1976</u>			<u>1977 and All Subsequent Years</u>		
	<u>Life</u>	<u>Year</u>	<u>Month</u>	<u>Life</u>	<u>Year</u>	<u>Month</u>
All seniors						
Standard	4400	5200	6400	4700	5600	6800
1-yr Trend	6400	7200	8300	6800	7700	8900
Sex:						
Male						
Standard	2800	3300	3800	2900	3400	3900
1-yr Trend	3800	4200	4600	3900	4300	4700
Comparison	4100	4400	4800	4200	4600	5000
Female						
Standard	2800	3200	3800	3200	3700	4300
1-yr Trend	3800	4100	4600	4300	4700	5200
Comparison	4100	4400	4800	4600	5000	5500
College Plans:						
None or under 4 yrs						
Standard	2600	2900	3400	2700	3100	3600
1-yr Trend	3400	3700	4100	3600	3900	4300
Comparison	3400	3700	4100	3600	3900	4300
Complete 4 yrs						
Standard	2800	3300	3800	3200	3600	4200
1-yr Trend	3800	4100	4600	4200	4600	5100
Comparison	3800	4100	4600	4200	4600	5100
Region:						
Northeast						
Standard	1100	1300	1500	1200	1400	1800
1-yr Trend	1500	1700	2000	1800	2000	2300
North Central						
Standard	1300	1600	1900	1400	1700	2000
1-yr Trend	1900	2200	2500	2000	2300	2700
South						
Standard	1100	1300	1600	1300	1600	1900
1-yr Trend	1600	1800	2100	1900	2200	2500
West						
Standard	760	930	1200	650	800	980
1-yr Trend	1300	1500	1700	1100	1200	1400
Population Density:						
Large SMSA						
Standard	1300	1600	2000	1400	1700	2100
1-yr Trend	2000	2200	2600	2100	2400	2700
Other SMSA						
Standard	2000	2300	2800	2100	2500	3100
1-yr Trend	2800	3200	3700	3100	3500	4000
Non-SMSA						
Standard	1100	1300	1500	1100	1300	1600
1-yr Trend	1500	1700	2000	1600	1800	2100

TABLE E-6

"Effective N" Values for Percent Using Alcohol

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>1977 and All Subsequent Years</u>
All seniors			
Standard	1200	1500	1600
1-yr Trend	2200	2900	3100
Sex:			
Male			
Standard	1100	1500	1600
1-yr Trend	1800	2500	2600
Comparison	2100	2900	3000
Female			
Standard	810	1000	1100
1-yr Trend	1500	1800	2100
Comparison	1800	2200	2500
College Plans:			
None or under 4 yrs			
Standard	NA	1400	1400
1-yr Trend	NA	2300	2400
Comparison	NA	2300	2400
Complete 4 yrs			
Standard	NA	1000	1100
1-yr Trend	NA	1800	2100
Comparison	NA	1800	2100
Region:			
Northeast			
Standard	380	520	590
1-yr Trend	700	930	1100
North Central			
Standard	500	650	690
1-yr Trend	910	1200	1200
South			
Standard	430	530	640
1-yr Trend	780	970	1200
West			
Standard	80	120	100
1-yr Trend	530	780	650
Population Density:			
Large SMSA			
Standard	490	660	700
1-yr Trend	880	1200	1300
Other SMSA			
Standard	420	550	590
1-yr Trend	1300	1700	1900
Non-SMSA			
Standard	390	520	540
1-yr Trend	700	930	970

TABLE B-7

"Effective N" Values for Percent Using Cigarettes

	<u>Class of 1975</u>		<u>Class of 1976</u>		<u>1977 and All Subsequent Years</u>	
	<u>Life</u>	<u>Month</u>	<u>Life</u>	<u>Month</u>	<u>Life</u>	<u>Month</u>
All-seniors						
Standard	2200	2900	2900	3800	3100	4000
1-yr Trend	3800	4600	5000	6000	5300	6400
Sex:						
Male						
Standard	1600	2000	2300	2800	2300	2800
1-yr Trend	2500	2900	3400	4000	3500	4100
Comparison	2800	3200	3900	4400	4000	4500
Female						
Standard	1800	2200	2200	2700	2500	3100
1-yr Trend	2700	3200	3400	3900	3800	4500
Comparison	3100	3500	3800	4400	4300	4900
College Plans:						
None or under 4 yrs						
Standard	NA	NA	2000	2500	2100	2600
1-yr Trend	NA	NA	3100	3800	3200	3700
Comparison	NA	NA	3100	3600	3200	3700
Complete 4 yrs						
Standard	NA	NA	2300	2800	2500	3100
1-yr Trend	NA	NA	3400	3900	3800	4400
Comparison	NA	NA	3400	3900	3800	4400
Region:						
Northeast						
Standard	530	680	710	920	810	1000
1-yr Trend	900	1100	1200	1500	1400	1700
North Central						
Standard	700	900	900	1200	950	1200
1-yr Trend	1200	1400	1500	1800	1600	2000
South						
Standard	600	760	740	950	880	1100
1-yr Trend	1000	1200	1200	1500	1500	1800
West						
Standard	300	400	450	590	370	490
1-yr Trend	690	830	1000	1200	840	1000
Population Density:						
Large SMSA						
Standard	680	870	910	1200	970	1200
1-yr Trend	1100	1400	1500	1800	1600	2000
Other SMSA						
Standard	1000	1300	1300	1700	1400	1800
1-yr Trend	1700	2100	2200	2700	2400	2900
Non-SMSA						
Standard	540	690	720	920	740	950
1-yr Trend	910	1100	1200	1500	1300	1500

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>1977 and Later</u>	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>1977 and Later</u>
All seniors						
Standard	1400	1500	2700	2300	2400	4400
1-yr Trend	1900	2000	3600	2600	2800	5000
Sex:						
Male						
Standard	640	710	1200	1100	1200	2000
1-yr Trend	860	950	1700	1200	1300	2300
Comparison	930	1000	1800	1200	1300	2400
Female						
Standard	710	700	1400	1200	1200	2300
1-yr Trend	940	940	1800	1300	1300	2600
Comparison	1000	1000	2000	1300	1300	2600
College Plans:						
None or under 4 yrs						
Standard	NA	640	1100	NA	1000	1800
1-yr Trend	NA	850	1500	NA	1200	2100
Comparison	NA	850	1500	NA	1200	2100
Complete 4 yrs						
Standard	NA	710	1400	NA	1200	2300
1-yr Trend	NA	940	1800	NA	1300	2600
Comparison	NA	940	1800	NA	1300	2600
Region:						
Northeast						
Standard	340	360	620	550	590	1000
1-yr Trend	450	480	830	620	670	1200
North Central						
Standard	440	450	890	720	750	1500
1-yr Trend	590	600	1200	820	840	1700
South						
Standard	370	370	710	620	610	1200
1-yr Trend	500	490	950	700	690	1300
West						
Standard	170	200	300	320	380	560
1-yr Trend	260	300	440	400	470	690
Population Density:						
Large SMSA						
Standard	430	460	800	700	750	1300
1-yr Trend	570	610	1100	790	850	1500
Other SMSA						
Standard	640	660	1200	1100	1100	2000
1-yr Trend	850	890	1700	1200	1200	2300
Non-SMSA						
Standard	340	360	620	550	590	620
1-yr Trend	450	480	830	630	670	1200

TABLE B-9

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

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>1977 and All Subsequent Years</u>
All seniors			
Standard	3500	4600	4900
1-yr Trend	5300	7000	7500
Sex:			
Male			
Standard	2000	2800	2800
1-yr Trend	2900	4000	4100
Comparison	3200	4400	4500
Female			
Standard	2700	3300	3800
1-yr Trend	3600	4500	5100
Comparison	3500	4400	5500
College Plans:			
None or under 4 yrs			
Standard	NA	2500	2600
1-yr Trend	NA	3600	3700
Comparison	NA	3600	3700
Complete 4 yrs			
Standard	NA	3300	3700
1-yr Trend	NA	4500	5000
Comparison	NA	4500	5000
Region:			
Northeast			
Standard	840	1100	1300
1-yr Trend	1300	1700	1900
North Central			
Standard	1100	1400	1500
1-yr Trend	1700	2200	2300
South			
Standard	930	1200	1400
1-yr Trend	1400	1800	2100
West			
Standard	640	930	780
1-yr Trend	970	1400	1200
Population Density:			
Large SMSA			
Standard	1100	1400	1500
1-yr Trend	1800	2200	2300
Other SMSA			
Standard	1600	2100	2200
1-yr Trend	2400	3200	3400
Non-SMSA			
Standard	840	1100	1200
1-yr Trend	1300	1700	1800

* Use of half-pack or more a day.

TABLE B-10

"Effective N" Values for Additional Variables

<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: Perceived Harmfulness Proportions Disapproving Attitude Regarding Legality	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 "1-yr Trend" values.
The Social Milieu: Parental Disapproval Exposure to Drug Use Perceived Availability of Drugs	Divide the actual Ns located in Table 14-1, 15-2, 15-4, and 16-1 by 2.0 for "Standard" values and by 1.56 for "1-yr Trend" values.
Probability of Future Use	Divide the actual Ns located in Table 6 of the chapter for the drug in question (Table 2-6 for marihuana/hashish, for example) by 2.0 for "Standard" values and by 1.56 for "1-yr Trend" values.
Thirty-Day Prevalence of Daily Use	Use "Effective Ns" from Table B-9 for marihuana, alcohol, and cigarettes. For the other drug classes, divide the actual Ns in Table 1-6 by 1.21.

TABLE B-11

Confidence Intervals (95% Confidence Level)
Around Percentage Values

GUIDE TO USING THIS TABLE:

1. Locate the portion of the table with the "Observed Percentage" value closest to the percentage in question (for 2.9% use the column labelled 3% at the top and 97% at the bottom).
2. Locate the "Effective N" value in the table closest to the "Effective N" value obtained from Tables B-2 through B-8 (for an "Effective N" of 2700, choose the row marked 3000).
3. Locate the table entries that correspond to the "Observed Percentage" and "Effective N" chosen (in this case, 0.6 and 0.7).
4. For observed percentages found at the top of the table, i.e. ones between 1% and 50%, subtract the left entry (0.6) from the real observed percentage ($2.9 - 0.6 = 2.3\%$) to get the lower confidence limit. Add the right entry (0.7) to the observed percentage ($2.9 + 0.7 = 3.6\%$) to get the upper confidence limit. (Thus, in this case, the confidence interval around 2.9% extends from 2.3% to 3.6%.)
5. For observed percentages found at the bottom of the table, i.e. ones between 50% and 99%, the process is reversed. For example, if the observed percentage was actually 97.1% with Effective N = 2700, the appropriate table entries would once again be 0.6 and 0.7. But for observed percentages between 50% and 99%, we must add the left entry to the observed percentage ($97.1 + 0.6 = 97.7\%$) and subtract the right entry ($97.1 - 0.7 = 96.4\%$) to get the confidence limits. (Thus, the confidence interval around 97.1% extends from 96.4% to 97.7%.)
6. A handy check on the above steps is to observe that the confidence interval is always smaller in the direction closest to the nearest limit (0% or 100%). (So, for example, the confidence interval around 2.9% in (4) above does not extend as far toward 0% as it does toward the more distant end of the scale. Similarly, the confidence interval around 97.1% does not extend as far toward 100% as it does toward the farther end of the scale.)

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 <u>UP</u> THE APPROPRIATE COLUMN:																	

NOTE: Table entries have been computed 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.

For the .01 confidence interval values, multiply the table entries by 1.1314.

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

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

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 entries 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

"Effective N"	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	0.6	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%

"Effective N"	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%

"Effective N"	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%

"Effective N"	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	4.9	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
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
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
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	2.6	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		
6000	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 = 15% or 85%

p = 20% or 80%

p = 30% or 70%

p = 50%

TABLE B-13

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
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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, and South								
Standard	7.84	5.76	5.66	4.41	3.35	3.06	2.56	2.10
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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
1-yr Trend	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</u>		<u>Daily Prevalence in</u> <u>Last Thirty Days</u>
	<u>Marihuana</u> <u>Alcohol</u>	<u>All Other</u> <u>Drugs</u>	<u>Marihuana</u> <u>Alcohol</u> <u>Cigarettes</u>
All seniors			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
Sex:			
Male			
Standard	2.25	1.37	2.89
1-yr Trend	1.69	1.21	2.02
Comparison	1.56	1.19	1.82
Female			
Standard	2.25	1.37	2.40
1-yr 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
1-yr Trend	1.69	1.21	2.02
Comparison	1.69	1.21	2.02
Complete 4 yrs			
Standard	2.25	1.37	2.40
1-yr Trend	1.69	1.21	1.77
Comparison	1.69	1.21	1.77
Region:			
Northeast			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
North Central			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
South			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
West			
Standard	3.35	1.77	3.61
1-yr Trend	2.25	1.44	2.37
Population Density:			
Large SMSA			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
Other SMSA			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37
Non-SMSA			
Standard	2.25	1.37	3.61
1-yr Trend	1.69	1.21	2.37

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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 eight (weighted) respondents.

Number of Cases Reported in Tables

- As a matter of convenience, most tables show approximate number(s) of (unweighted) cases for the most current year, rounded to the nearest hundred. The actual numbers vary slightly from drug to drug. For the total sample in 1978 the range is from one percent lower to three percent higher than the approximate values shown. For chapters 2 through 12, the actual numbers for the first five tables can be found in the sixth table (total sample), and the actual numbers for the eighth and ninth tables can be found in the seventh table (total sample for two questionnaire forms).
- Tables C-1 and C-2 below present complete numbers of respondents, both weighted and unweighted, for all years and for each of the subgroups as well as for the total samples. The numbers shown in the tables in the report depart from the numbers in C-1 and C-2 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 subsequent years 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 two most recent classes are included. Appendix B outlines the procedures which were followed in computing these significance tests.
- For the reader interested in computing other significance tests and/or confidence intervals, Appendix B outlines the procedures and provides the necessary tables.

TABLE C-1

Sample Sizes (Unweighted and Weighted) in Subgroups by Year

	Number of Cases							
	Class of 1975 ^a		Class of 1976		Class of 1977		Class of 1978	
	<u>Unwtd.</u>	<u>Wtd.</u>	<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	18924	18924
Sex:								
Male	5799	5573	7999	7244	8449	7362	8603	8782
Female	6371	6102	7924	7261	9188	7855	9416	9270
College Plans:								
None or under 4 yrs	b	b	7179	6880	7764	7052	7857	8416
Complete 4 yrs	b	b	7963	6997	8933	7411	9264	8848
Region:								
Northeast	3014	2697	4034	3572	4760	3961	4841	4609
North Central	3951	3834	5098	4689	5697	4761	5576	5414
South	3366	3858	4177	4599	4908	4822	5566	6295
West	2296	1725	3369	2286	3071	2295	2941	2607
Population Density:								
Large SMSA	3826	2874	5158	3939	5852	4263	5904	4861
Other SMSA	5767	4964	7475	5971	8386	6446	8485	8322
Non-SMSA	3034	4275	4045	5235	4198	5131	4535	5742

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

^aThe 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.

^bMissing 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^a

	Number of Cases							
	Class of 1975		Class of 1976		Class of 1977		Class of 1978	
	<u>Unwtd.</u>	<u>Wtd.</u>	<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	3785	3785
Sex:								
Male	1450	1393	1600	1449	1690	1472	1721	1756
Female	1593	1628	1585	1452	1838	1571	1883	1854
College Plans:								
None or under 4 yrs	b	b	1436	1376	1553	1410	1571	1683
Complete 4 yrs	b	b	1593	1399	1787	1482	1853	1770
Region:								
Northeast	754	674	807	714	952	792	968	928
North Central	988	958	1020	938	1139	952	1115	1088
South	842	964	835	920	982	964	1113	1259
West	574	431	674	457	614	459	588	621
Population Density:								
Large SMSA	956	718	1032	788	1170	853	1181	972
Other SMSA	1442	1247	1495	1194	1677	1289	1697	1664
Non-SMSA	758	1069	809	1047	840	1026	907	1148

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

^aThe Ns 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.

^bMissing 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

1. Have you ever smoked cigarettes?

- 1 Never—GO TO QUESTION 2
- 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

Frequency of Heavy Drinking

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 [REDACTED]
- ② Yes

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

- a. ...in your lifetime?
- b. ...during the last 12 months? ...
- c. ...during the last 30 days?

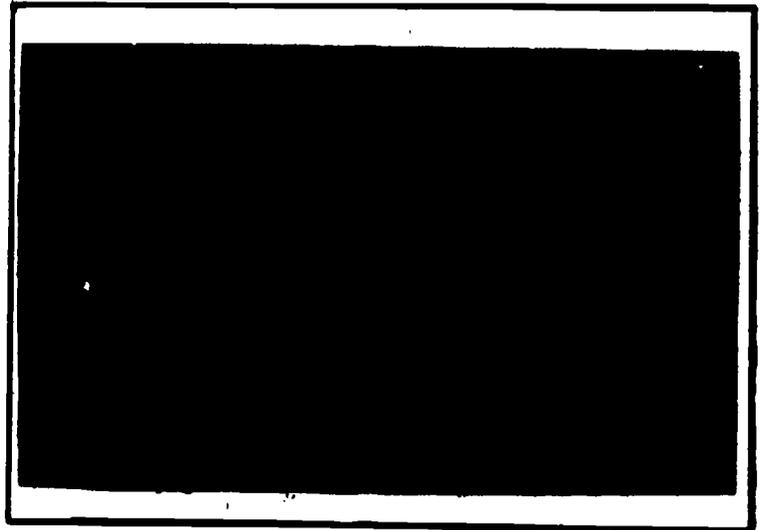
This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

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.

6. Think back over the LAST TWO WEEKS. How many times have you had five or more drinks in a row? (A "drink" is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)

- ① None
- ② Once
- ③ Twice
- ④ Three to five times
- ⑤ Six to nine times
- ⑥ Ten or more times

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



Marihuana/Hashish

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

Prevalence/Recency

Prevalence of Daily Use

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

- a. ...in your lifetime?
- b. ...during the last 12 months?
- c. ...during the last 30 days?

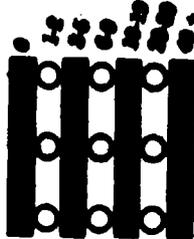
This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

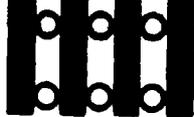
This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 7c above.

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

Hallucinogens

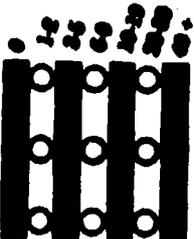
8. On how many occasions (if any) have you used LSD ("acid")...

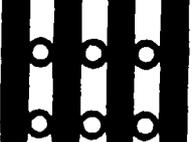
a. ...in your lifetime? 

b. ...during the last 12 months? ... 

c. ...during the last 30 days? 

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

a. ...in your lifetime? 

b. ...during the last 12 months? ... 

c. ...during the last 30 days? 

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

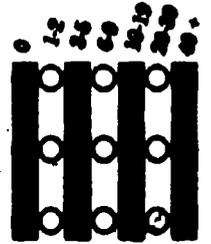
- Lifetime Prevalence/Frequency*
- Annual Prevalence/Frequency*
- Thirty-Day Prevalence/Frequency*

Prevalence/Recency

Prevalence of Daily Use

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

- a. ...in your lifetime?
- b. ...during the last 12 months? ...
- c. ...during the last 30 days?



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*

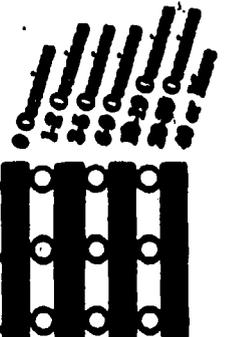
Prevalence/Recency

Prevalence of Daily Use

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...

- a. ...in your lifetime?
- b. ...during the last 12 months?
- c. ...during the last 30 days?



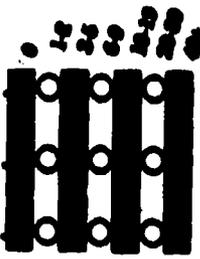
This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

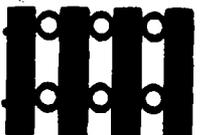
This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 11c above.

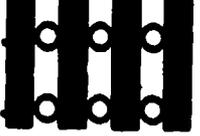
*For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Sedatives

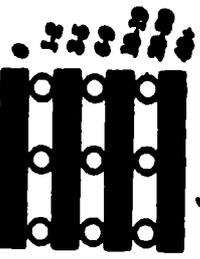
12. On how many occasions (if any) have you used tranquilizers (quadrin, meperin, methoqualone) on your own—that is, without a doctor telling you to take them...

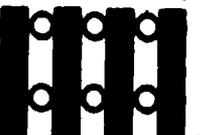
a. ...in your lifetime? 

b. ...during the last 12 months? 

c. ...during the last 30 days? 

13. Barbiturates are sometimes prescribed by doctors to help people relax or get to sleep. They are sometimes called downers, 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...

a. ...in your lifetime? 

b. ...during the last 12 months? 

c. ...during the last 30 days? 

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. . .

a. . .in your lifetime?

b. . .during the last 12 months?

c. . .during the last 30 days?



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

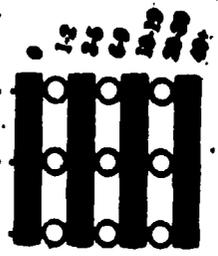
Prevalence of Daily Use

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

a. . .in your lifetime?

b. . .during the last 12 months?

c. . .during the last 30 days?



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. . .

a. ...in your lifetime?

b. ...during the last 12 months?

c. ...during the last 30 days?

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 gas, or breathed the contents of aerosol spray cans, or inhaled any other gases or sprays in order to get high. . .

a. ...in your lifetime?

b. ...during the last 12 months?

c. ...during the last 30 days?

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.

From questionnaire Form 1

Probability of Future Use

- Alcohol
- Barbiturates^a
- Cigarettes
- Cocaine
- Heroin
- LSD^b
- Marihuana or Hashish
- Other Opiates
- Stimulants
- Tranquilizers

Do you think you will be using (name of drug) five years from now?

- Ⓐ I definitely will
- Ⓑ I probably will
- Ⓒ I probably will not
- Ⓓ I definitely will not

(NOTE: These questions are asked in Form 1 only and occur in the different sections of that questionnaire which deal separately with each drug.)

^aThis question asked about barbiturates only, not all sedatives.

^bThis question asked about LSD only, not all hallucinogens.

From questionnaire Form 1

Grade of First Use of Drugs

106. When (if ever) did you FIRST do each of the following things? Don't count anything you took because a doctor told you to. (Mark one circle for each line.)

		Never	Occasionally	Often	Very Often
a. Smoke cigarettes on a daily basis	<input type="radio"/>				
b. Try an alcoholic beverage—more than just a few sips	<input type="radio"/>				
c. Try marijuana or hashish	<input type="radio"/>				
d. Try LSD	<input type="radio"/>				
e. Try any psychedelic other than LSD	<input type="radio"/>				
f. Try amphetamines	<input type="radio"/>				
g. Try quaaludes	<input type="radio"/>				
h. Try barbiturates	<input type="radio"/>				
i. Try tranquilizers	<input type="radio"/>				
j. Try cocaine	<input type="radio"/>				
k. Try heroin	<input type="radio"/>				
l. Try any narcotic other than heroin	<input type="radio"/>				

(NOTE: Beginning in 1977, this question was also asked on Form 3.)

*From questionnaire Form 1*Degree and Duration of Feeling High . . .

Alcohol
 LSD^a
 Marijuana
 Other Psychedelics^a

When you use (name of drug) how high do you usually get?

- ① Not at all high
- ② A little high
- ③ Moderately high
- ④ Very high

When you use (name of drug) how long do you usually stay high?

- ① Usually don't get high
- ② One to two hours
- ③ Three to six hours
- ④ Seven to 24 hours
- ⑤ More than 24 hours

^aLSD and "other psychedelics" were asked about separately, not combined as hallucinogens.

*From questionnaire Form 1*Degree and Duration of Feeling High . . .

Amphetamines
 Barbiturates^b
 Cocaine
 Heroin
 Other Narcotics
 Quaaludes^b
 Tranquilizers

When you take (name of drug) how high do you usually get?

- ① Not at all high
- ② A little high
- ③ Moderately high
- ④ Very high

⑤ I don't take it to get high

When you take (name of drug) how long do you usually stay high?

- ① Usually don't get high
- ② One to two hours
- ③ Three to six hours
- ④ Seven to 24 hours
- ⑤ More than 24 hours

^bBarbiturates and quaaludes were asked about separately, not combined as sedatives.

(NOTE: These questions are asked on Form 1 only and occur in the different sections of that questionnaire which deal separately with each drug.)

II. BACKGROUND AND DEMOGRAPHIC VARIABLES

Sex

8. 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) ① ②

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

22. 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
Danger Unknown

- a. Smokes one or more packs of cigarettes per day (1) (2)
- b. Try marijuana (pot, grass) once or twice (1) (2)
- c. Smoke marijuana occasionally (1) (2)
- d. Smoke marijuana regularly (1) (2)
- e. Try LSD once or twice (1) (2)
- f. Take LSD regularly (1) (2)
- g. Try heroin (smack, horse) once or twice (1) (2)
- h. Take heroin occasionally (1) (2)
- i. Take heroin regularly (1) (2)
- j. Try barbiturates (downers, goofballs, reds, yellows, etc.) once or twice (1) (2)
- k. Take barbiturates regularly (1) (2)
- l. Try amphetamines (uppers, pep pills, bennies, speed) once or twice (1) (2)
- m. Take amphetamines regularly (1) (2)
- n. Try cocaine once or twice (1) (2)
- o. Take cocaine regularly (1) (2)
- p. Try one or two drinks of an alcoholic beverage (beer, wine, liquor) (1) (2)
- q. Take one or two drinks nearly every day (1) (2)
- r. Take four or five drinks nearly every day (1) (2)
- a. Have five or more drinks once or twice each weekend (1) (2)

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.)

a. Smoking one or more packs of cigarettes per day

b. Trying marijuana (pot, grass) once or twice

c. Smoking marijuana occasionally

d. Smoking marijuana regularly

e. Trying LSD once or twice

f. Taking LSD regularly

g. Trying heroin (smack, horse) once or twice

h. Taking heroin occasionally

i. Taking heroin regularly

j. Trying a barbiturate (downer, goofball, red, yellow, etc.) once or twice

k. Taking barbiturates regularly

l. Trying an amphetamine (upper, pep pill, bennie, speed) once or twice

m. Taking amphetamines regularly

n. Trying cocaine once or twice

o. Taking cocaine regularly

p. Trying one or two drinks of an alcoholic beverage (beer, wine, liquor)

q. Taking one or two drinks nearly every day

r. Taking four or five drinks nearly every day

s. Having five or more drinks once or twice each weekend

Don't Disapprove
Disapprove
Strongly Disapprove

Vertical scale with circles for marking responses, corresponding to items a through s.

(NOTE: In 1975 only, this question asked about people "who are 20 or older".)

From questionnaire Form 4

Attitudes Regarding Legality of Drug Use

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 ...
- b. Smoking marijuana in public places
- c. Taking LSD in private
- d. Taking LSD in public places
- e. Taking amphetamines (uppers) or barbiturates (downers) in private
- f. Taking amphetamines or barbiturates in public places
- g. Taking heroin (smack, horse) in private
- h. Taking heroin in public places
- i. Getting drunk in private
- j. Getting drunk in public places
- k. Smoking tobacco in certain specified public places

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

(NOTE: In 1975 only, this question asked about people "who are 20 or older".)

From questionnaire page 6

**Attitudes Regarding
Marihuana Laws**

21. In particular, there has been a great deal of public debate about whether marihuana use should be legal. Which of the following policies would you favor?

- Ⓐ Using marihuana should be entirely legal
- Ⓑ It should be a minor violation—like a parking ticket—but not a crime
- Ⓒ It should be a crime
- Ⓓ Don't know

22. If it were legal for people to USE marihuana, should it also be legal to SELL marihuana?

- Ⓐ No
- Ⓑ Yes, but only to adults
- Ⓒ Yes, to anyone
- Ⓓ Don't know

23. If marihuana were legal to use and legally available, which of the following would you be most likely to do?

- Ⓐ Not use it, even if it were legal and available
- Ⓑ Try it
- Ⓒ Use it about as often as I do now
- Ⓓ Use it more often than I do now
- Ⓔ Use it less than I do now
- Ⓕ Don't know

IV. ATTITUDES AND BELIEFS OF PARENTS AND FRIENDS

From questionnaire Form 4

Parents' Disapproval of Drug Use . . .

8. How do you think your PARENTS feel (or would feel) about YOU doing each of the following things? (Mark one circle for each line.)

- a. Smoking one or more packs of cigarettes per day
- b. Trying marijuana (pot, grass) once or twice
- c. Smoking marijuana occasionally
- d. Smoking marijuana regularly
- e. Trying LSD once or twice
- f. Trying an amphetamine (upper, pep pill, benin, speed) once or twice

Not Disapprove
Disapprove
Strongly Disapprove

8. How do you think your PARENTS feel (or would feel) about YOU . . .

- g. Taking one or two drinks nearly every day
- h. Taking four or five drinks nearly every day
- i. Having five or more drinks once or twice each weekend

Not Disapprove
Disapprove
Strongly Disapprove

From questionnaire Form 4

Friends' Disapproval of Drug Use

10. How do you think your CLOSE FRIENDS feel (or would feel) about YOU doing each of the following things? (Mark one circle for each line.)

a. Smoking one or more packs of cigarettes per day	<input type="radio"/>				
b. Trying marijuana (pot, grass) once or twice ..	<input type="radio"/>				
c. Smoking marijuana occasionally	<input type="radio"/>				
d. Smoking marijuana regularly	<input type="radio"/>				
e. Trying LSD once or twice	<input type="radio"/>				
f. Trying an amphetamine (upper, pep pill, bennie, speed) once or twice	<input type="radio"/>				
g. Taking one or two drinks nearly every day ...	<input type="radio"/>				
h. Taking four or five drinks nearly every day ..	<input type="radio"/>				
i. Having five or more drinks once or twice each weekend	<input type="radio"/>				

V. EXPOSURE TO DRUG USE

From questionnaire Form 3

Exposure to Drug Use

29. During the LAST 12 MONTHS, how often have you been around people who were taking each of the following to get high or for "kicks"?

- | | Not At All | Once or Twice | Occasionally | Often |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Marijuana (pot, grass) or hashish | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. LSD | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Other psychedelics (mescaline, peyote, PCP, etc.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Amphetamines (uppers, pep pills, bennies, speed) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Barbiturates (downers, goofballs, reds, yellows, etc.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Tranquilizers (Librium, Valium, Miltown) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Cocaine ("coke") | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Heroin (smack, horse) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Other narcotics (methadone, opium, codeine, paregoric, etc.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. Alcoholic beverages (beer, wine, liquor) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

From questionnaire Form 2

Friends' Use of Drugs

6. How many of your friends would you estimate . . .

None
A Few
Some
Most
All

- a. Smoke cigarettes? ①②③④⑤
- b. Smoke marijuana (pot, grass) or hashish? ①②③④⑤
- c. Take LSD? ①②③④⑤
- d. Take other psychedelics (mescaline, peyote, PCP, etc.)? ①②③④⑤
- e. Take amphetamines (uppers, pep pills, bennies, speed)? ①②③④⑤
- f. Take quaaludes (quads, methaqualone)? ①②③④⑤
- g. Take barbiturates (downers, goofballs, reds, yellows, etc.)? ①②③④⑤
- h. Take tranquilizers? ①②③④⑤
- i. Take cocaine? ①②③④⑤
- j. Take heroin (smack, horse)? ①②③④⑤
- k. Take other narcotics (methadone, opium, codeine, paregoric, etc.)? ①②③④⑤
- l. Use inhalants (sniffing glue, aerosols, laughing gas, etc.)? ①②③④⑤
- m. Drink alcoholic beverages (liquor, beer, wine)? ①②③④⑤
- n. Get drunk at least once a week? ①②③④⑤

VI. 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.)

- a. Marijuana (pot, grass).....
- b. LSD
- c. Some other psychedelic (mescaline, peyote, psilocybin, PCP, etc.)
- d. Amphetamines (uppers, pep pills, bennies, speed)
- e. Barbiturates (downers, goofballs, reds, yellows, etc.)
- f. Tranquilizers
- g. Cocaine
- h. Heroin (smack, horse)
- i. Some other narcotic (methadone, opium, codeine, paregoric, etc.)

Very Difficult
Difficult
Somewhat Difficult
Somewhat Easy
Easy

<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"/>				

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."*

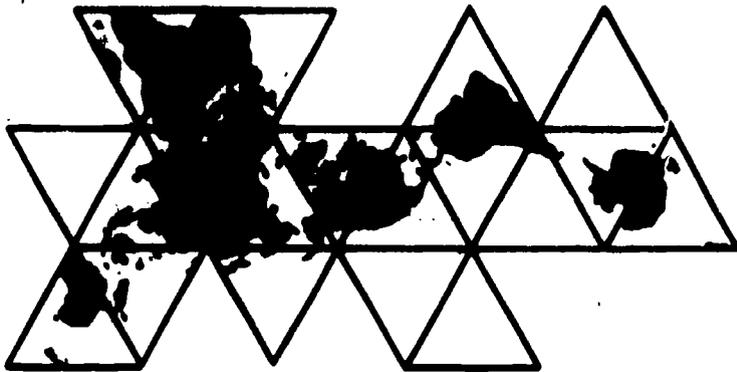
Also, separate questions on "Barbiturates" and "Quaaludes" in this study were combined to form a "Sedatives" category. Because bracketed frequency categories are used on the original variables, some judgement must be exercised in deciding how to combine them to generate frequencies of use for the derivative 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.

1978

INSTITUTE FOR SOCIAL RESEARCH
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

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