Codebook for Monitoring the Future Public-Use Data: 12th-Grade Surveys, 2023

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Introduction

MONITORING THE FUTURE: A CONTINUING STUDY OF AMERICAN YOUTH, 12TH GRADE, 2023, is conducted by the University of Michigan's Institute for Social Research and receives its core funding under grants from the National Institute on Drug Abuse (R01 DA001411 and R01 DA016575). The Principal Investigator is Richard Miech, with Co-Investigators Lloyd D. Johnston and Megan Patrick.

The research project is uniquely comprehensive in several respects: surveys are conducted annually on an ongoing basis; the samples are large and nationally representative; and the subject matter is broad, encompassing some 1,400 questions per year.

The Monitoring the Future (MTF) Project is designed to explore changes in many important values, behaviors, and lifestyle orientations of contemporary American youth. Two general types of tasks may be distinguished. The first is to provide a systematic and accurate "description" of the youth population of interest in a given year, and to quantify the direction and rate of the changes taking place among them over time. The second task, more analytic than descriptive, involves the "explanation" of the relationships and trends observed to exist.

Terminology

This alphabetized list is provided to facilitate understanding of some of the terminology used in this document and in correspondence with researchers:

BX:	Abbreviation referring to 8th and 10th grade data
BY:	Abbreviation referring to base year - 12th grade data
Core variables:	Generally, the substance use triplets (lifetime, 12-month and 30-day drug use questions) and the demographic variables that are asked on every form of the survey.
Form-specific variables:	Variables that are not asked on all forms. For example, questions about reasons for drug use and situations of use are asked of 12th graders in Form 1 only.
Item Reference Number or Item Number (IRN):	An identifier that is unique to a given question across all grades, forms and years. Researchers can use the IRN to search the various documentation to find the same variables across grades, forms and years. Note that a given question may be on multiple forms and variable numbers are generally different, depending on grade, form and year. For example, the IRN for the question asking about number of occasions of having five or more drinks in a row (binge drinking) is 00850.
NAHDAP	National Addiction & HIV Data Archive Program - the repository for the MTF data
Triplet:	For most drugs in the MTF survey, this is the reference to three time frames: lifetime, 12-month and 30-day use.
Vnum:	Abbreviation for Variable numbers - the variable name for each variable in a data set

MTF Data Collection

Data Collection 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 more than 100 public and private high schools selected to provide an accurate cross-section of high school seniors throughout the United States. Detailed procedures for the 12th grade data collection are explained in detail elsewhere [1, 2, 3].

One limitation in the design of the MTF is that it does not include those young people 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—about 18% percent from the late 1970s to the early 2000s, and then steadily declining to a level of 5% in 2022 [4]—though not an unimportant segment, since certain behaviors, such as illicit drug use and delinquency, tend to be higher than average in this group. 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. 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 that drop out. There is no reason to expect dramatic changes in those rates across adjacent years for the foreseeable future, and recently published government statistics indicate only very small year-to-year decreases in dropout rates since 1970.

Some may use these high school data to draw conclusions about changes for the entire age group. While the investigators do not encourage such extrapolation, they suspect that the conclusions reached often would be valid, since over 80 percent of the age group is in the surveyed segment of the population and changes among those not in school are likely to parallel the changes among those who are.

Survey Mode

From 1975 to 2018, students completed optically-scannable paper-and-pencil questionnaires (i.e. “scantron” forms) during a regular classroom period.

For the 2019 administration, all schools were randomized to a paper or an electronic tablet survey condition: the students in half of the schools completed the traditional paper-and-pencil survey, and the students in the other half of the schools completed surveys via electronic tablets preloaded with the MTF surveys. MTF reports 2019 drug prevalence results using the pooled sample of tablet- and paper-based responses. Differences in substance use prevalence across the two survey modes were negligible, as we detail in the article *The impact of survey mode on US national estimates of adolescent drug prevalence: Results from a randomized controlled study* [5].

In contrast to the finding of no survey mode effects for the outcome of drug prevalence, MTF did find evidence of potential mode effects for questions on student attitudes and beliefs. Investigators examining these measures with 2019 MTF data – or comparing results before and after 2019 – should carefully examine and consider survey mode effects. The magnitude of such effects appear to vary by question, from substantial to negligible. Included in these survey mode effects are possible "screen break" effects, which can affect questions that span multiple tablet screens. For example, questions on perceived risk of substances start with a question stem and then ask about more than a dozen substance. When these questions are presented in the traditional paper-and-pencil survey, the list of substances all fit on one page. For tablet presentation, it was necessary for the listing to span two or more screens. Initial analyses indicated that estimates from these types of survey questions may significantly differ based on the groupings of drugs per screen. The list of variables affected by the changes in screen breaks for multiple-screen questions are detailed in the codebooks for the 2020 data and the 2021 data.

In 2020, all students recorded their survey answers on tablets that the project brought to the schools, preloaded with the MTF surveys. Data collection in 2020 was halted prematurely on March 15, 2020 when the University of Michigan stopped all projects that involved face-to-face data collection because of COVID-19 concerns. This resulted in a 2020 sample size about 25% the size of a regular data collection. Before data collection halted, MTF had surveyed schools in all nine U.S. Census geographical divisions. Detailed analyses indicate that the baseline, curtailed MTF 2020 sample did not differ from the nationally-representative results from previous years in terms of sociodemographics or prevalence of substances that have had stable prevalence in recent years. For example, in 2020 the sample percentage who self-reported as female and the percentage who reported ever using marijuana were within the respective ranges of estimates observed from 2017-2019. These findings support the 2020 data as a random sample of what MTF would have collected with a full data collection. For detailed analysis, please see the appendix to the article, *Trends in Use and Perceptions of Nicotine Vaping Among US Youth From 2017 to 2020* [6]. Note that the smaller sample sizes result in larger confidence intervals for study estimates, which may be quite unstable for small demographic groups or survey questions asked of only a small subsample.

In 2021, MTF for the first time administered its school questionnaires via a web-based survey that students completed on their personal or school-provided device. This switch to a web-based questionnaire was a COVID-19 adaptation that allowed students the flexibility to complete the questionnaire either in a classroom or at home if their school building was closed and they were remote schooling. Access to the survey was through a school-specific web link provided by MTF.

Half-way through the 2021 survey administration, it was discovered by MTF that an additional set of "screen breaks" was impacting the data collection. When the survey was ported to the web-based instrument, changes in presentation of some series of questions was altered to meet the web design requirements. The web survey was reprogrammed to match the tablet presentation of questions in 2019. Please see the 2021 data codebook for details on the effected variables.

In 2022, MTF continued the web-based survey administration. Depending on the school, surveys were completed in-person, remotely, or a combination of both, and MTF survey proctors were permitted in the classrooms. Please see *MTF Variable Information* for the variables included in the

data sets to indicate instruction mode and whether or not a proctor was in the school for the survey administration.

In 2023, all MTF procedures remained unchanged from 2022: Web-based data collection continued with in-school proctors now the norm.

Sampling Information

Securing a nationally representative sample of high school seniors in public and private schools is a multi-stage procedure. Stage 1 is the selection of particular geographic areas throughout the contiguous United States. 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: GEOGRAPHIC AREAS. The geographic areas used in this study are the primary sampling units (PSUs) developed by the Sampling Section of the Survey Research Center (SRC) for use in the Center's nationwide interview studies. Because these same PSUs are used for personal interview studies by the SRC, local field representatives can be assigned to administer the data collections in practically all schools. When this is not possible MTF pays for transportation of SRC staff to the target school.

STAGE 2: SCHOOLS. 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 selection of high schools are made such that the probability of drawing a school is proportionate to the size of its senior class. When a selected school is unwilling to participate, a replacement school as similar to it as possible is selected from the same geographic area.

STAGE 3: STUDENTS. In schools with fewer than 350 seniors, MTF attempts to include all of them in the data collection. In larger schools, a subset of seniors is often selected, either by randomly sampling classrooms or by some other random method that is convenient for the school and judged to be unbiased. Beginning in 2019, upon request by the school, MTF will survey the entire population of seniors. A sampling weight is assigned to each respondent in order to take account of variations in the sizes of samples from one school to another, as well as the variations in selection probabilities occurring at the earlier stages of sampling. For a table of the sample sizes and student response rates see *Appendix B: Sample Size and Student Response Rates*.

One other important feature of the school sampling procedure should be noted here. All schools (except for half of the initial 1975 sample) are asked to participate for two years, 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, and examination of drug prevalence data from the "matched half-

samples" showed that the half samples 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 telephone and email contacts from an MTF project staff member. The staff member attempts to address any questions or concerns, and when necessary, makes arrangements to contact and seek permission from other school district officials. The procedures are basically the same for schools asked to participate for the second year.

Once the school's agreement to participate is obtained, beginning in January, arrangements are made by phone and email for administering the questionnaires. A local SRC representative is assigned to work with the school to set a mutually agreeable date for the survey and facilitate the administration.

ADVANCE CONTACT WITH TEACHERS AND STUDENTS. The assigned SRC representative is instructed to contact the school two weeks ahead of the actual date of administration. This contact serves as an occasion to meet the School Contact Person and teachers whose classes will participate. During this visit, the SRC representative is asked to confirm that the parental permission procedures have been completed. They are also asked to provide teachers 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 7-10 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 are not tests and that there are no right or wrong answers. The flyer tells the 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). Parental consent involves, at a minimum, the school sending a letter describing the study and an informational flyer to the parents. The letter provides parents with an easy way to decline their child’s participation, if they so wish. Active consent procedures are used when the school or district requires them.

QUESTIONNAIRE ADMINISTRATION. The questionnaire administration in each school is carried out by the local SRC representatives, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during normal class periods whenever possible, although 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 in the classroom to help guarantee an orderly atmosphere for the survey. Teachers are urged to avoid walking around the room so that students may feel free to answer without fear of being observed.

From 1975 through 2018, respondents were asked to complete paper-and-pencil questionnaires designed for optical scanning. Most respondents finish within a 45-minute class period; for those who cannot, an effort is made to provide a few minutes of additional time.

In the 2019 administration, all schools were randomized to a paper or an electronic tablet survey condition: the students in half of the schools completed the traditional paper-and-pencil survey, and the students in the other half of the schools completed surveys via electronic tablets preloaded with the MTF surveys.

In 2020, all students recorded their survey answers on tablets preloaded with the MTF surveys that the project brought to the schools.

In 2021, due to the ongoing COVID-19 pandemic, some schools were not allowing visitors and teaching was being done remotely or a hybrid of in-person and remote learning. Where possible, the classroom teacher was asked to introduce the survey and read an introductory statement prior to the students completing the survey. This information was also presented to the student on screen at the beginning of the web survey. All students completed the web-based survey using their personal or school-provided device. Access to the survey was through a school-specific web link provided by MTF.

Starting In 2022 and going forward, all students completed the web-based survey using their personal or school-provided device, and surveys could be done remotely or in-person. Access to the survey was through a school-specific web link provided by MTF. MTF survey proctors were permitted in the schools, and an MTF proctor was present in the majority of the classrooms surveyed.

PROCEDURES FOR PROTECTING CONFIDENTIALITY. In any study that relies on voluntary reporting of drug use or other illegal acts, it is essential to develop procedures that 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.

The first information given to students about the survey consists of a descriptive flyer emphasizing the confidentiality and voluntary participation of the survey. This information is repeated at the start of the questionnaire administration. Each participating student is instructed to read the message on the cover of the questionnaire or on the first few screens of the tablet or web survey, which stresses the importance and value of the study, notes that answers will be kept strictly confidential, states that the study is completely voluntary, and tells the student, "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 instructions explain that these are the reasons for asking students to provide their name and address. The instructions explain that survey responses are stored separately from name and address information, and that the two are never connected.

Lastly, in order to protect the confidentiality of responses and the identity of respondents, a number of alterations have been made in the original dataset to prepare it for public release; these alterations are described later in the section *MTF Variable Information*.

Content Areas and Questionnaire Design

Given the breadth of content of the questions in the Monitoring the Future surveys, the study is not presented to respondents as a "drug use study". Though drug use and related attitudes are the topics which receive the most extensive coverage in the Monitoring the Future project, 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, and marital and family plans, as well as a variety of background and demographic factors.

Because many questions are needed to cover all of these topic areas, much of the questionnaire content is divided into different questionnaire forms: five forms were used in 1975-88, and a sixth form was added in 1989. The questionnaires are randomly distributed to participants in equal proportion, with each student completing one form. This sequence produces five or six virtually identical subsamples.

About one-third of each questionnaire form consists of key or "core" variables that are common to all forms. All demographic variables and some measures of substance use are included in this "core" set of measures. This use of the full sample for substance use and demographic measures provides a more accurate estimation on these dimensions and also makes it possible to link them statistically to all the other measures that are included on fewer forms.

The following list provides the subject area codes and definitions that are used in the cross-time index of grade 12 questionnaire items provided separately in this archive. Where appropriate, the same code letters have been assigned to each subject area in the 8th/10th grade cross-time index.

Measurement Content Areas

A. DRUGS. Drug use and related attitudes and beliefs, drug availability and exposure, surrounding conditions and social meaning of drug use, views of significant others regarding drugs.

B. EDUCATION. Educational lifestyle, values, experiences, and environments

C. WORK AND LEISURE. Vocational values, meaning of work and leisure, work and leisure activities including computer use, preferences regarding occupational characteristics and type of work setting.

D. SEX ROLES AND FAMILY. Values, attitudes, and expectations about marriage, family structure, sex roles, and sex discrimination.

E. POPULATION CONCERNS. Values and attitudes about overpopulation and birth control.

F. CONSERVATION, MATERIALISM, EQUITY, etc. Values, attitudes, and expectations related to conservation, pollution, materialism, equity, and the sharing of resources. Preferences regarding type of dwelling and urbanicity.

G. RELIGION. Religious affiliation, practices, and views.

H. POLITICS. Political affiliation, activities, and views.

I. SOCIAL CHANGE. Values, attitudes, and expectations about social change.

J. SOCIAL PROBLEMS. Concern with various social problems facing the nation and the world.

K. MAJOR SOCIAL INSTITUTIONS. Confidence in and commitment to various major social institutions (business, unions, branches of government, press, organized religion, military, etc.).

L. MILITARY. Views about the armed services and the use of military force. Personal plans for military service.

M. INTERPERSONAL RELATIONSHIPS. Qualitative and quantitative characteristics of cross-age and peer relationships. Interpersonal conflict.

N. RACE RELATIONS. Attitudes toward and experiences with other racial groups.

O. CONCERN FOR OTHERS. Concern for others; voluntary and charitable activities.

P. HAPPINESS. Happiness and life satisfaction, overall and in specific life domains.

Q. OTHER PERSONALITY VARIABLES. Attitudes about self, including self-esteem, locus of control, loneliness, risk-taking, trust in others, importance placed on various life goals, counterculture orientation, hostility, boredom, anxiety.

R. BACKGROUND. Demographic and family background characteristics, living arrangements

S. DEVIANT BEHAVIOR AND VICTIMIZATION. Delinquent behaviors, driving violations and accidents (including those under the influence of drugs), victimization experiences.

T. HEALTH. Health habits, somatic symptoms, illness, medical treatment, COVID-19.

Representativeness and Validity

The samples for this study are intended to be representative of high school seniors attending private or public schools throughout the 48 contiguous 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. 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 high school seniors and the degree to which the data obtained are likely to be valid.

It is possible to distinguish at least four ways in which survey data of this sort might fall short of being fully representative. First, some sampled schools refuse to participate, which could introduce some bias. Second, the failure to obtain questionnaire data from 100 percent of the students sampled in participating schools could also introduce bias. Third, the answers provided by participating students are open to both conscious and unconscious distortions which could reduce validity. Finally, limitations in sample size and/or design could place limits on the accuracy of estimates.

SCHOOL PARTICIPATION. As noted in the description of the sampling design, schools are invited to participate in the study for a two-year period. For each school that declines to participate, a similar school (in terms of size, geographic area, urbanicity, etc.) is recruited as a replacement for that "slot." Since the study's inception, either an original school or a replacement school has been obtained for greater than 90% of the sample units. About 95% of schools which have participated for one data collection have agreed to participate for a second. 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 subtler, however. For example, if it turned out that most schools with "drug problems" refused to participate, that would seriously bias the drug estimates derived from 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 schools' refusals to participate are varied and largely a function of happenstance events of the particular year. Thus, the investigators feel fairly confident that school refusals have not seriously biased the surveys.

STUDENT PARTICIPATION. Completed questionnaires are obtained from three- fourths to four-fifths of all 12th graders sampled. 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 them. 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 corrected through the use of special weighting; however, this course was not chosen because the bias in estimates (in drug use, where the potential effect was hypothesized to be largest) was determined to be quite small and because the necessary weighting procedures would have introduced undesirable complications. 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 the senior year. Of course, some students refuse to complete or turn in a questionnaire, either on their own or because their parents refused consent. However, SRC representatives in the field estimate this proportion to be only about two percent.

VALIDITY OF SELF-REPORT DATA. Survey measures of delinquency and 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. Like most studies dealing with these areas, the present study does not include direct, objective validation of the present measures; however, the considerable amount of inferential evidence which exists strongly suggest that the self-report questions produce largely valid data. A number of factors have given the investigators reasonable confidence about the validity of the responses to what are presumably among the most sensitive questions in the study: a low non-response rate on the drug questions; a large proportion admitting to some illicit drug use; the consistency of findings across several years of the present study; strong evidence of construct validity (based on relationships observed between variables acting as expected); a close match between these data and the findings from other studies using other methods; and the findings from several methodological studies that have used objective validation methods.

As for the other measures, a few have a long and venerable history — as scholars of the relevant literature will recognize — though some of these measures have been modified to fit the present questionnaire format. Many questions, however, have been developed specifically for this project through a process of question writing, pilot testing, pretesting, and question revision or elimination. Some have already been included in other publications from the study, but many have not; therefore, there exists little empirical evidence of their validity and reliability.

ACCURACY OF THE SAMPLE. A sample survey can never 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 3 – 4 million seniors per year. But perfect accuracy among this population would be extremely expensive and certainly not a good use of resources 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 the size of the student sample and by the number of schools in which they were clustered. For the purposes of this introduction, it is sufficient to note that virtually all estimates based on the total sample have confidence intervals of +/- 1.5 percentage points or smaller - sometimes considerably smaller. This means that, had the project been able to invite all schools and all seniors in the 48 contiguous states to participate, the results from such a massive survey would be within an estimated 1.5 percentage points from the present sample findings 95 times out of 100. This is a quite high level of accuracy, and one that permits the detection of fairly small trends from one year to the next.

Because of the complex sampling design, standard means of assessing confidence intervals are not appropriate. In years 2017 and earlier, Appendix C of Volume 1 reported information on how to calculate confidence intervals for point estimates and how to calculate statistics that test the significance of changes over time or of differences between subgroups. This appendix is no longer necessary with the availability of MTF's complex sample design variables through the virtual data enclave (VDE) provided by the National Addiction & HIV Data Archive Program (NAHDAP). After completing an application process that includes a signed pledge to protect the confidentiality of the data, researchers are permitted access to the restricted data. This secure, remote VDE access allows researchers to compute such statistics directly using the unaltered MTF sampling weights and clustering variables. The restricted cross-sectional MTF data can be found here. (Note that interested readers may also refer to Appendix C of earlier volumes for the information it provides about design effects and how their computational influence varies by substance.)

CONSISTENCY AND THE MEASUREMENT OF TRENDS. One other point is worth noting in a discussion of the validity of the 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 such biases.

INTERPRETING RACIAL/ETHNIC DIFFERENCES. Until 2005, racial/ethnic identification was provided for the two largest racial/ethnic subgroups in the population — those who identified themselves as white or Caucasian and those who identified themselves as Black or African American. Identification was not provided for the other ethnic categories (Native Americans, Asian Americans, Mexican Americans, Puerto Rican Americans, or other Latin Americans) since each of these groups comprised a small proportion of the sample in any given year, which means that their small Ns (in combination with their clustered groupings in a limited number of schools) would yield estimates which would be too unreliable. Because of increases in the number of those who identify themselves as one of the Hispanic groups, we now include identification for this category.

However, the analyst should bear in mind that Blacks and Hispanics - each of which constitutes approximately 8-15 percent of each year's sample - are represented by perhaps as few as 200 respondents per year on any single questionnaire form. Further, because our sample is a stratified clustered sample, it yields less accuracy than would be yielded by a pure random sample of equal size (see Appendix B of the annual MTF volumes for details). Therefore, because of the limited number of cases, the margin of sampling error around any statistic describing Blacks or Hispanics is larger than for most other subgroups.

There exists, however, a way to determine the replicability of any finding involving racial comparisons. Since most questions are repeated from year to year, one can readily establish the degree to which a finding is replicated by looking at the results in prior and subsequent years. Given the relatively small Ns for minority groups, the analyst is urged to seek such replication before putting much faith in the reliability of any particular racial comparison.

There are factors in addition to reliability, however, which could be misleading in the interpretation of racial differences. Given the social importance which has been placed on various racial differences reported in the social science literature, the investigators would like to caution the analyst to consider the various factors which could account for differences. These factors fall into three categories: differential representation in the sample, differential response tendencies, and the confounding of race with a number of other background and demographic characteristics. The following discussion is based on analyses that were conducted prior to 2005, when identifiers for Hispanics were not included, so the discussion is specific to Blacks. However, the points made, particularly those about differential representation and confounding of race/ethnicity with other background and demographic characteristics, would be relevant to Hispanics, as well.

DIFFERENTIAL REPRESENTATION. Census data characterizing American young people in the approximate age range of those in this sample show somewhat lower proportions of Blacks than whites remain in school through the end of the twelfth grade (also, the Hispanic group has considerably higher dropout rates than either whites or Blacks, which means that student samples become increasingly less representative of the entire age group at higher grades.) Therefore, a slightly different segment of the

Black population than of the white population resides in the target population of high school seniors. Further, the samples appear to under represent slightly those Black males who, according to census figures, are in high school at the twelfth-grade level. Identified Black males comprise about 6 percent of the sample, whereas census data suggest that they should comprise around 7 percent. Therefore, it appears that more Black males are lost from the target population than white males or females of either race. This may be due to generally poorer attendance rates on the part of some Black males and/or unwillingness on the part of some to participate in data collections of this sort.

In sum, a smaller segment of the Black population than of the white population of high school age is represented by the data contained here. Insofar as any characteristic is associated with being a school dropout or absentee, it is likely to be somewhat disproportionately underrepresented among Blacks in the sample.

DIFFERENTIAL RESPONSE TENDENCIES. In examining the full range of variables, racial differences in response tendencies have been noted. First, the tendency to state agreement in response to agree-disagree questions is generally somewhat greater among Blacks than among whites. For example, Blacks tend to agree more with the positively worded items in the index of self-esteem, but they also tend to agree more with the negatively worded items. As it happens, that particular index has an equal number of positively and negatively worded items, so that any overall "agreement bias" should be self-canceling when the index score is computed. However, group differences in agreement bias are likely to affect results on questions employing the agree-disagree format. Fortunately, most of the questions are not of that type.

There has also been observed a somewhat greater than average tendency for Black respondents to select extreme answer categories on attitudinal scales. For example, even if the same proportion of Blacks as whites felt positively (or negatively) about some subject, fewer of the whites are likely to say they feel very positively (or negatively). The analyst should be aware that differences in responses to particular questions may be related to these more general tendencies.

A somewhat separate issue in response tendency is a respondent's willingness to answer particular questions. The missing data rate may reflect willingness to answer particular questions. If a particular question or set of questions has a missing data rate higher than is true for the prior or subsequent questions, then presumably more respondents than usual were unwilling (or perhaps unable) to answer it. Such an exaggerated missing data rate exists for Black males on the set of questions dealing with the respondent's own use of illicit drugs. Clearly a respondent's willingness to be candid on such questions depends on his or her trust of the research process and of the researchers themselves. The exaggerated missing data rates for Black males in these sections may reflect, at least in part, less trust. The analyst is advised to check for exceptional levels of missing data when making comparisons on any variable in which candor is likely to be reduced by lower system trust. One bit of additional evidence related to trust in the research process is that higher proportions of Blacks than whites reported that if they had used marijuana or heroin they would not have been willing to report it in the survey.

COVARIANCE WITH OTHER FACTORS. Some characteristics such as race are highly confounded (correlated) with other variables -- variables that may, in fact, explain some observed racial differences. Put another way, at the aggregate level we might observe a considerable racial difference on some characteristic, but once we control for some background characteristic such as socio-economic level or

region of the country -- that is, once we compare the Black respondents with whites who come from similar backgrounds -- there may be no racial difference at all.

Race is correlated with important background and demographic variables. A higher proportion of Blacks live in the South and a higher proportion grew up in families with the mother and/or father absent, and more had mothers who worked while they were growing up. A substantially higher proportion of Blacks are Baptists, and Blacks tend to attribute more importance to religion than do whites. A higher proportion of Black respondents have children, and on the average, they are slightly older than the white sample. As was mentioned earlier Black males are more underrepresented in our sample than Black females.

These differences in background, demographic, and descriptive characteristics are noted because, in any attempt to understand why a racial difference exists, one would want to be able to examine the role of these covarying characteristics.

MTF Variable Information

Questionnaire Change Documents, 2023

Please see the documents *2023 MTF QChanges by form.pdf* and *2023 MTF QChanges by type of change.pdf* for details on variables added, dropped, and changed in 2023.

Non-survey variables included in the data files

Sample weight variable and Complex sample design variables

As noted in the study description, the MTF sample is drawn to be nationally-representative of 8th, 10th, and 12th grade students in the contiguous United States. To achieve this representative sample, a three-stage sampling procedure is used. Variables are maintained to account for the sampling design; however, these design variables (stratum and cluster), along with the original sampling weight variable, are omitted from the public use data files for reasons of confidentiality.

The MTF does provide an altered sampling weight variable, ARCHIVE_WT, for use when analyzing the public use data. The weight variable was altered from its original version to a modified version prior to public distribution of the data. THIS RESULTS IN SLIGHT DISCREPANCIES BETWEEN THE PERCENTAGES AND N SIZES IN THE ANNUAL MTF VOLUMES AND THOSE FROM WEIGHTED ANALYSES OF THE PUBLIC USE DATASETS. Typically, the variation is less than 1%.

Note: *The weight variable provided, ARCHIVE_WT, should be used for all analyses*.

For researchers interested in combining two or all three grades (8, 10, 12) into one analysis, please see *Appendix C: MTF's Complex Sample Design and Combining Multiple Grades for Analysis*. Special considerations are needed to adjust the sampling weight (and clustering) when combining grades for analysis.

OF SPECIAL NOTE: For researchers who wish to incorporate the complex sample design (stratum, cluster) and the unaltered sampling weight variables in their work, these variables are now available through restricted access from NAHDAP. Please see Monitoring the Future (MTF) Restricted-Use Cross-Sectional Datasets available through NAHDAP for more information.

Respondent ID variable

An ID variable is provided in each data set. The RESPONDENT_ID is unique *within* year and can be used to link cases in the core data file (DS1) with each of the form-specific data files (DS2-DS7) in a given year.

Variable	Variable label	Notes
RESPONDENT_ID	R'S ID - SERIAL #	Unique case identifier *within* year

Data management note: It is recommended that users start their work with the core data set (DS1). DS1 is a compilation across all six survey forms of Part B (substance use) and Part C (demographics) of the surveys - the parts common to all forms - plus other substance use variables of interest that may not be on all forms (e.g. vaping-related variables). Using the DS1 file (or a subset of the file), merge the form-specific data needed from data file(s) DS2-DS7 with the core data using the appropriate ID variable *within* a given year (1976-2011: V4(R 'S ID-SERIAL #); 2012:RESPONDENT_ID; 2013:V6 (ARCHIVE ID) was used (reason unknown); and 2014 to the present:RESPONDENT_ID). Approaching the data management in this way will simplify the process of combining data across forms as users will not need to rename as many variables or, perhaps, not need to combine as many data files within a given year.

Respondent's geographic location information

Three variables are included in the data sets to describe the respondent's geographic location without identifying school or state. These are (1) census region (Northeast, Midwest, South, and West), (2) whether or not the school is located in a Metropolitan Statistical Area (MSA), and (3) whether or not the school is located in a Large MSA.

Item number	Variable label	Notes
80013	SCHL RGN-4 CAT	1=Northeast 2=Midwest 3=South 4=West
80016	SELF-REP/NOT=0	Whether or not the school is located in a Metropolitan Statistical Area (MSA)
80017	SMSA/NON-SMSA=0	Whether or not a school is located in a large MSA

Survey mode and design variables

Data collection of the nationally-representative samples of 12th graders continues. Sampling procedures remained consistent with previous years, and the MTF questionnaires were administered using web-based surveys. Depending on the school, the surveys were completed in-person, remotely, or using a combination of both, and MTF survey proctors were present in the majority of classrooms. Students were provided a link to the survey, and the surveys were completed on their own device or one provided by the school at home or in the classroom.

These variables are included in all data sets and provide details for the administration of the 2023 data collection:

Variable	Variable label	Notes
V545	89978:SURVEY MODE: 1=PAPER 2=TABLET 3=WEB	For 2021+, all surveys were administered via web. This variable replaces TABLET (89977:RESPONDENT: TABLET=1 PAPER=0) in prior years.
V548	90016:MODE OF SURVEY ADMIN	Response values are: 4=SYNCHRONOUS (surveys administered to students in a classroom all together) 5=ASYNCHRONOUS (during a specific timeframe but not all together) 6=MULTIPLE TYPES (combination of the two)
V549	90017:INSTRUCTION MODE AT ADMIN	Response values are: 1 =ALL IN-PERSON (students present in classrooms) 2 =ALL REMOTE (students all remote) 3 =HYBRID (combination of in-person and remote)
V550	90018:PROCTOR IN SCHOOL	Response values are: 1 = YES 0 = NO

Randomization of question sets

In an effort to shorten the length of the surveys, "blocks" of questions were asked of some respondents and not others. Each survey had two blocks that were randomly assigned within form to a respondent. The blocks are labeled "blue" and "orange".

This variable provides information to differentiate the "blue" and "orange" block questions:

Variable	Variable label	Value labels
RANDOM_GROUP	90013:RANDOM_GROUP	1="BLUE:(1)" 2="ORANGE:(2)"

Variables impacted by this randomization have an additional missing data code in the data files and are labeled as

-8 = "R ASSIGNED BLUE:(-8)"
(i.e. missing data because the question is in the orange block for this form and the respondent received the blue block of questions)

OR

-8 = "R ASSIGNED ORANGE:(-8)"
(i.e. missing data because the question is in the blue block on this form and the respondent received the orange block of questions)

Please see *Appendix D: Randomization of question blocks* for form-specific details of the variables impacted by the randomization experiment

Variables omitted and recoded to protect confidentiality

In order to ensure confidentiality and protect the identity of the MTF survey respondents, some variables have been omitted or altered before release in the public data sets. The information in this section provides details for the omitted and recoded variables.

Omitted Variables.

The following variables are omitted from the public data set(s).

All Forms

Item number	Variable label	Question text	Notes
00010	R'S BIRTH YEAR	In what year were you born?	Please see section on RECODED VARIABLES
00020	R'S BIRTH MONTH	In what month were you born?	AGE <> 18 DICHOTOMY

Omitted Variables, continued.

All Forms

Item number	Variable label	Question text	Notes
		How do you describe yourself? (Select one or more responses.)	
00041	R'S RACE BLACK	Black or African American	Please see section on RECODED VARIABLES R'S RACE B/W/H
00042	R'S RACE CHICANO	Mexican American or Chicano	
00043	R'S RACE CUBAN	Cuban American	
00044	R'S RACE PUERTO	Puerto Rican	
00045	R'S RACE OTH HIS	Other Hispanic or Latino	
00046	R'S RACE ASIAN	Asian American	
00047	R'S RACE WHITE	White (Caucasian)	
00048	R'S RACE IND/AK	American Indian or Alaska Native	
00049	R'S RACE HI/OTPI	Native Hawaiian or Other Pacific Islander	
36960	R'S RACE MID EASTERN	Middle Eastern	
		How many brothers and sisters do you have? (Include stepbrothers and sisters and half-brothers and sisters.)	
00075	# OLDER BR/SIS	Older brothers and sisters	Please see section on RECODED VARIABLES R'S # SIBLINGS
00076	# YOUNGER BR/SIS	Younger brothers and sisters	
		Which of the following people live in the same household with you? (Mark all that apply.)	
00080	R'S HSHLD ALONE	I live alone	The questions about Rs Household composition are omitted. Only questions for R'S HSHLD: FATHER, MOTHER, SIBLING are included in the data sets
00120	R'S HSHLD GRPRNT	Grandparent(s)	
00130	R'S HSHLD SPOUSE	My husband/wife	
00140	R'S HSHLD CHLDRN	My child(ren)	
00150	R'S HSHLD RELTVS	Other relative(s)	
00160	R'S HSHLD NONRLT	Non-relative(s)	
34810	R'S HSHLD OTHER	Other, specify	
00360	R'S RELGS PRFNC	What is your religious preference?	Not available in the public use data

Form 1 - omitted from the public use data

Item number	Variable label	Question text
22155	CURRENT HEIGHT 3	What is your current height (in feet and inches) without shoes?
22165	CURRENT WEIGHT 3	What is your current weight (in pounds) without shoes or clothing?

Form 2 - omitted from the public use data

Item number	Variable label	Question text
25880	ARRSTD&TKN 2 POL	During the LAST 12 MONTHS, how often have you. . . Been arrested and taken to a police station?

Form 5 - omitted from the public use data

Item number	Variable label	Question text
22155	CURRENT HEIGHT 3	What is your current height (in feet and inches) without shoes?
22165	CURRENT WEIGHT 3	What is your current weight (in pounds) without shoes or clothing?

Recoded Variables

The following variables are recoded and included in the public data set(s).

All datasets

Item Number	Variable Label	Additional notes
89848	AGE <> 18 DICHOTOMY	AGE <> 18 DICHOTOMY 1=younger than 18 years old, 2=18 years old or more -9=missing data on birth year, or birth month if it is required Derived from 00010 R'S BIRTH YEAR, and, if needed, 00020 R'S BIRTH MONTH, and the month that the questionnaire was administered. If the birth year value indicates that the respondent is 18, then the month of administration is compared to the month of birth. If the questionnaire was given before the month of birth, or if both were the same month, then the respondent is determined to be younger than 18.
89501	R'S RACE	In the public use files: 1=BLACK 2=WHITE 3=HISPANIC, -9=All Other Codes, multiple responses, and missing data From 2006 forward, each of the questionnaire forms contains the new version of the race question which was introduced on half of the forms in 2005. The new version lists several different response options and prompts the respondents to select all that apply to them. In cases where a respondent selected options which fell into more than one of the three recoded categories (Black, White, Hispanic), the value for the recoded variable was deleted and defined as missing. Of note: in 2021, Middle Eastern was added to the response options.
89849	R'S #SIBLINGS	Responses to questions 00075:# OLDER BR/SIS and 00076:# YOUNGER BR/SIS were combined and bracketed before original variables were omitted. Response options for both variables before they were combined were: 0=None, 1=1 sibling, 2=2 siblings, 3=3 or more siblings

Recoded Variables, continued.

All datasets

Item Number	Variable Label	Question text	Additional notes
00660	# TCKTS AFT DRNK	How many of these tickets or warnings occurred after you were . . . Drinking alcoholic beverages?	Response options truncated to 0=None 1=One 2=Two 3=Three or More
00670	# TCKTS AFT MARJ	How many of these tickets or warnings occurred after you were . . . Using marijuana?	Response options truncated to 0=None 1=One 2=Two 3=Three or More
00680	# TCKTS AFT OTDG	How many of these tickets or warnings occurred after you were . . . Using other illegal drugs?	Response options truncated to 0=None 1=One 2=Two 3=Three or More
00700	# ACDTS AFT DRNK	How many of these accidents occurred after you were . . . Drinking alcoholic beverages?	Response options truncated to 0=None 1=One 2=Two 3=Three or More
00710	# ACDTS AFT MARJ	How many of these accidents occurred after you were . . . Using marijuana?	Response options truncated to 0=None 1=One 2=Two 3=Three or More
00720	# ACDTS AFT OTDG	How many of these accidents occurred after you were . . . Using other illegal drugs?	Response options truncated to 0=None 1=One 2=Two 3=Three or More

Recoded Variables, continued.

Form 6

Item Number	Variable Label	Question text	Additional notes
23530	EVER HELD BACK	Have you ever had to repeat a grade in school?	Response options are recoded to: 1=No 2=Yes
23540	NEED SUMMER SCHL	Did you ever attend summer school to make up for poor grades or to keep from being held back?	Response options are recoded to: 1=No 2=Yes
25140	EVER SUSPENDED	Have you ever been suspended or expelled from school?	Response options are recoded to : 1=No 2=Yes

Core dataset

For cocaine: #X COKE [LIFETIME, LAST12MO, LAST30DA]: Data from forms 1, 3, 4, and 6 are combined responses to separate questions concerning "crack" and "cocaine in any other form".

Item Number	Variable Label	Question text	Additional notes
	On how many occasions (if any) have you taken cocaine (sometimes called "coke," "crack," "rock").		
00950	#X COKE/LIFETIME	. . . in your lifetime?	Single question on forms 2 and 5
00960	#X COKE/LAST12MO	. . . during last 12 months?	Single question on forms 2 and 5
00970	#X COKE/LAST30DA	. . . during last 30 days?	Single question on forms 2 and 5

#X COKE [LIFETIME, LAST12MO, LAST30DA], continued

Item Number	Variable Label	Question text	Additional notes
	On how many occasions (if any) have you used "crack" (cocaine in chunk or rock form)		
22260	#X CRACK/LIFETIME	. . . . . in your lifetime?	Question on forms 1, 3, 4 & 6; responses combined with 22320:#X OTH COKE/LIFE to create a composite 00950: #X COKE/LIFETIME variable
22270	#X CRACK/LAST12MO	. . . during the last 12 months?	Question on forms 1, 3, 4 & 6; responses combined with 22330:#X OTH COKE/12MO to create a composite 00960: #X COKE/LAST12MO
22280	#X CRACK/LAST30DAY	. . . during the last 30 days?	Question on forms 1, 3, 4 & 6; responses combined with 22340:#X OTH COKE/30DA to create a composite 00970: #X COKE/LAST30DA variable
	On how many occasions (if any) have you used cocaine in any other form		
22320	#XOTH COKE/LIFE	. . . in your lifetime?	Question on forms 1, 3, 4 & 6; responses combined with 22260 #X CRACK/LIFETIME To create a composite 00950: #X COKE/LIFETIME variable
22330	#XOTH COKE/12MO	. . . during the last 12 months?	Question on forms 1, 3, 4 & 6; responses combined with 22270:#X CRACK/LAST12MO to create a composite 00960: #X COKE/LAST12MO
22340	#XOTH COKE/30DA	. . . during the last 30 days?	Question on forms 1, 3, 4 & 6; responses combined with 22280:#X CRACK/LAST30DAY to create a composite 00970: #X COKE/LAST30DA variable

Missing Data for the Western Region

Beginning in 1997, a select group of questions were excluded from some schools in the Western region, rendering those schools potentially identifiable. Thus, these variables were intentionally changed to missing data (coded -9) for ***all*** schools in the Western region of the contiguous United States.

All datasets

Item number	Variable label	Question text
00370	R'ATTND REL SVC	How often do you attend religious services?
00380	RLGN IMP R'S LF	How important is religion in your life?

Form 2

Item number	Variable label	Question text
06520	FRQ FIGHT PARNTS	During the LAST 12 MONTHS, how often have you . . . Argued or had a fight with either of your parents?

Form 5

Item number	Variable label	Question text
10060	FAM BUYS THG -ND	How much do you agree or disagree with each statement below? My family and I often buy things we really don't need; we could get along with much less

Form 6

Item number	Variable label	Question text
25180	#X PRNT CHK HMWK	How often do your parents (or stepparents or guardians) do the following? Check on whether you have done your homework
25190	#X PRNT HLP HMWK	How often do your parents (or stepparents or guardians) do the following? Provide help with your homework when it's needed
25200	#X PRNT GV CHORE	How often do your parents (or stepparents or guardians) do the following? Require you to do work or chores around the home
38090	#X PRNT LIMIT SCRN TIME	How often do your parents (or stepparents or guardians) do the following? Limit the amount of your screen time (such as video games, social media, TV/movies, etc.)
25220	#X PRNT LMT OUT	How often do your parents (or stepparents or guardians) do the following? Limit the amount of time you can go out with friends on school nights

OF SPECIAL NOTE: For researchers who wish to incorporate any of these omitted or truncated variables in their work, incorporate the complex sample design variables (stratum, cluster and unaltered sampling weight variables), and/or would like to use all available data for the Western region, these variables are now accessible through restricted access from NAHDAP. Please see Monitoring the Future (MTF) Restricted-Use Cross-Sectional Datasets for more information.

Substance Use Variables in the Core data set (DS1)

The following is a list of substance use variables in the Core data set (DS1), arranged by substance use category. DS1 is a compilation across all six survey forms of Part B (substance use) and Part C (demographics) of the surveys - the parts common to all forms - plus other substance use variables of interest that may not be on all forms (e.g. vaping-related variables).

Substance Category	Item Number	Variable Label	Variable number in the Core dataset
Tobacco / Nicotine	00760	EVR SMK CIG,REGL	V2101
	00780	#CIGS SMKD/30DAY	V2102
	33720	#X LRG CIGAR/30DAY	V2547
	33730	#X FLVD SML CIGAR/30DAY	V2548
	33740	#X REG SML CIGAR/30DAY	V2549
	34050	#X TOB HOOKAH/30DAY	V2564
	34390	# DAYS SMKLESS/30DAY	V2576
	39000	#X NIC GUMMIES/30DAY	V7960
	38990	#X NIC CANDY/30DAY	V7961
	39010	NIC POUCH	V7962
	39020	NIC POUCH EVER	V7963
	39030	#X NIC POUCH/LIFETIME	V7964
	39040	#X NIC POUCH/LAST12MO	V7965
	39050	#X NIC POUCH/LAST30DA	V7966
Alcohol	00790	EVER DRINK	V2103
	00810	#X DRNK/LIFETIME	V2104
	00820	#X DRNK/LAST12MO	V2105
	00830	#X DRNK/LAST30DAY	V2106
	00840	#X DRK ENF FL HI	V2107
	00850	5+DRK ROW/LST 2W	V2108
	25020	#XDRUNK/LIFETIME	V2020
	25030	#XDRUNK/LAST12MO	V2021
	25040	#XDRUNK/LAST30DAY	V2022
	32690	#X ALCL+CAFFN/12MO	V2009
	39060	DAILY USE ALC/30DAY	V7942

Substance Use Variables in the Core data set, continued

Substance Category	Item Number	Variable Label	Variable number in the Core dataset
Marijuana / Hashish / CBD / cannabinoid	00860	#XMJ+HS/LIFETIME	V2115
	00870	#XMJ+HS/LAST12MO	V2116
	00880	#XMJ+HS/LAST30DAY	V2117
	33980	#X HASH OIL/12MO	V2927
	39070	DAILY USE MJ/30DAY	V7943
	38960	#X CBD/LIFETIME	V7957
	38970	#X CBD/LAST12MO	V7958
	38980	#X CBD/LAST30DA	V7959
	39200	#X DELTA8/12MO	V2934
Hallucinogens	00890	#X LSD/LIFETIME	V2118
	00900	#X LSD/LAST 12MO	V2119
	00910	#X LSD/LAST 30DAY	V2120
	00920	#X PSYD/LIFETIME	V2121
	00930	#X PSYD/LAST12MO	V2122
	00940	#X PSYD/LAST30DAY	V2123
	22660	#X MDMA/LIFETIME	V2032
	22670	#X MDMA/LAST12MO	V2033
	22680	#X MDMA/LAST30DAY	V2034
Cocaine / Crack	00950	#X COKE/LIFETIME	V2124
	00960	#X COKE/LAST12MO	V2125
	00970	#X COKE/LAST30DAY	V2126
	22260	#X CRACK/LIFETIME	V2459
	22270	#X CRACK/LAST12MO	V2460
	22280	#X CRACK/LAST30DAY	V2461
	22320	#XOTH COKE/LIFE	V2042
	22330	#XOTH COKE/12MO	V2043
	22340	#XOTH COKE/30DAY	V2044

Substance Use Variables in the Core data set, continued

Substance Category	Item Number	Variable Label	Variable number in the Core dataset
Amphetamines / Methamphetamines	00980	#X AMPH/LIFETIME	V2127
	00990	#X AMPH/LAST12MO	V2128
	01000	#X AMPH/LAST30DAY	V2129
	30800	#X METHAMPH/LIFE	V2029
	30810	#X METHAMPH/12MO	V2030
	30820	#X METHAMPH/30DAY	V2031
	31180	#X RITALIN/12MO	V2909
	32450	#X ADDERALL/12MO	V2307
Sedatives	01040	#X SED/BARB/LIFETIME	V2133
	01050	#X SED/BARB/LAST12MO	V2134
	01060	#X SED/BARB/LAST30DA	V2135
	31060	#X KETAMINE/12MO	V2912
Tranquilizers	01070	#X TRQL/LIFETIME	V2136
	01080	#X TRQL/LAST12MO	V2137
	01090	#X TRQL/LAST30DAY	V2138
Heroin	01100	#X 'H'/LIFETIME	V2139
	01110	#X 'H'/LAST 12MO	V2140
	01120	#X 'H'/LAST 30DAY	V2141
Other Narcotics	01130	#X NARC/LIFETIME	V2142
	01140	#X NARC/LAST12MO	V2143
	01150	#X NARC/LAST30DAY	V2144
	31310	#X OXYCONTN/12MO	V2907
	31320	#X VICODIN/12MO	V2908
	31670	#X COUGHMED/12MO	V2920
Inhalants	01160	#X INHL/LIFETIME	V2145
	01170	#X INHL/LAST12MO	V2146
	01180	#X INHL/LAST30DAY	V2147
Steroids / Body Building	22690	#X STRD/LIFETIME	V2493
	22700	#X STRD/LAST12MO	V2494
	22710	#X STRD/LAST30DAY	V2495
	31160	#X ANDRO/12MO	V2918
	31170	#X CREATINE/12MO	V2919

Substance Use Variables in the Core data set, continued

Substance Category	Item Number	Variable Label	Variable number in the Core dataset
Vaping	34230	EVER VAPE	V2566
	35910	VAPED NIC/LIFE	V7780
	35920	VAPED NIC/12MO	V7781
	35930	VAPED NIC DAYS/30DA	V7782
	35950	VAPED MJ/LIFE	V7783
	35960	VAPED MJ/12MO	V7784
	35970	VAPED MJ DAYS/30DA	V7785
	35980	VAPED FLAV/LIFE	V7786
	35990	VAPED FLAV/12MO	V7787
	36000	VAPED FLAV DAYS/30DA	V7788
	39220	#X VAPE VTMN OR OIL/12MO	V2937

Questionnaire form 1 processing

The form 1 questionnaire contains many more specific drug related questions in Part B than do the other questionnaire forms. In the form 1 dataset, copies of the "core" or common drug prevalence variables are created and then processed so that their data will be comparable to that of the other forms. Data from the core versions are then copied to the grade 12 core dataset; the form 1 dataset retains both versions. The primary difference between the copies is that, for the core versions, nonuse is inferred from the respondents' adherence to the skip instructions (the other forms do not include the same instructions). The "core" variables copied into the form 1 dataset are:

Item Number	Variable label	Variable Number in the Form 1 data set
00780	#CIGS SMKD/30DAY (CORE)	V1102
00850	5+DRK ROW/LST 2W (CORE)	V1108
00860	#XMJ+HS/LIFETIME	V1115
00870	#XMJ+HS/LAST12MO	V1116
00880	#XMJ+HS/LAST30DA	V1117
00950	#X COKE/LIFETIME	V1124
00960	#X COKE/LAST12MO	V1125
00970	#X COKE/LAST30DA	V1126

Revised question text for the core dataset

For the core dataset only, additional text was added to particular questions that were part of a series. The initial question in the series contains text not repeated on subsequent questions within that series. This additional text is meant to clarify and provide detail about the question for the user. To help improve the clarity of subsequent questions within the series this additional text has been repeated on each question. This repeating text is identical to what was stated on the questionnaire for the first question in that series. It has been designated by being placed into {braces} to be distinguishable from text that actually appeared in the questionnaire. No modifications were made to the question text for any of the other parts.

Highlights for 2023

MTF data collection efforts in 2023

Data collection of the full nationally-representative samples of 12th graders continued. Sampling procedures remained consistent, and survey administrations were adapted as needed for hybrid teaching environments: remote and in-class learning. Students were provided a link to the web-based survey, and the surveys could be completed on their own device or one provided by the school, at home or in the classroom. MTF survey proctors were present in the majority of the classrooms.

Continuation of randomized blocks of questions

"Blocks" of questions on each survey form were asked of some respondents and not others. Each survey form had two blocks that were randomly assigned within form to a respondent. The blocks were labeled "blue" and "orange". Please see *Randomization of question sets* and *Appendix D:Randomization of question sets* in the codebook for details.

Addition of questions about cannabidiol (CBD) use

New questions were added to forms 2, 4, and 6 to assess the use of cannabidiol (CBD).

CBD, or cannabidiol, is a compound produced by the cannabis plant. Use of CBD does not cause the “high” associated with marijuana.

On how many occasions (if any) have you used CBD….
. . . in your lifetime?
. . . during the last 12 months?
. . . during the last 30 days?

Response options: 1="0 Occasions" 2="1-2 Occasions" 3="3-5 Occasions" 4="6-9 Occasions" 5="10-19 Occasions" 6="20-39 Occasions" 7="40 or More"

Please see *Substance Use Variables in the Core data set (DS1)* for IRN and variables numbers in the DS1 data set.

Questions added back into the surveys in 2023

In 2022, the following questions were removed from the surveys but were added back in 2023:

00790:EVER DRINK (core, forms 2, 3, 4, 5, and 6)
38100:VAPE NIC@SCHL PAST 30DAYS (forms 1, 2, and 3)

Change to marijuana use questions

From 2020-2023, the question text stem for the marijuana use questions have changed on forms 2, 4, and 6 for the 12th grade. Here are the details for the changes from 2020-2023. Note that the data over all years, regardless of question stem changes, are in the same variables over time (00860:#XMJ+HS/LIFETIME, 00870:#XMJ+HS/LAST12MO, 00880:#XMJ+HS/LAST30DAY).

The stem applied to the "triplet" questions
a. …in your lifetime?
b. …during the last 12 months?
c. …during the last 30 days?

Response options have remained consistent over time: 1="0 Occasions" 2="1-2 Occasions" 3="3-5 Occasions" 4="6-9 Occasions" 5="10-19 Occasions" 6="20-39 Occasions" 7="40 or More"

	2020	2021	2022	2023
Form 1	On how many occasions (if any) have you used hashish ... On how many occasions (if any) have you used marijuana ...	On how many occasions (if any) have you used hashish ... On how many occasions (if any) have you used marijuana ...	On how many occasions (if any) have you used hashish ... On how many occasions (if any) have you used marijuana ...	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil) . . .
Form 2	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, hashish, hash oil). . .	The next questions are about MARIJUANA, which refers to cannabis products sometimes called pot, weed, hashish, hash oil, etc. Do NOT count any use of CBD products. On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, concentrates, etc.) …	The next questions are about MARIJUANA or cannabis (sometimes called pot, weed, or hashish). Do not count use of products containing only CBD. On how many occasions (if any) have you used marijuana (smoking, vaping, edibles).
Form 3	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . . Do NOT count any use of CBD products.	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . . Do NOT count any use of CBD products.	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . .

Change to marijuana use questions, 12th grade, continued

	2020	2021	2022	2023
Form 4	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, hashish, hash oil)...	The next questions are about MARIJUANA, which refers to cannabis products sometimes called pot, weed, hashish, hash oil, etc. Do NOT count any use of CBD products. On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, concentrates, etc.) …	The next questions are about MARIJUANA or cannabis (sometimes called pot, weed, or hashish). Do not count use of products containing only CBD. On how many occasions (if any) have you used marijuana (smoking, vaping, edibles).
Form 5	On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil). . .
Form 6	On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil). . .	On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, hashish, hash oil). . .	The next questions are about MARIJUANA, which refers to cannabis products sometimes called pot, weed, hashish, hash oil, etc. Do NOT count any use of CBD products. On how many occasions (if any) have you used marijuana in any form (e.g. smoking, vaping, edibles, concentrates, etc.) …	The next questions are about MARIJUANA or cannabis (sometimes called pot, weed, or hashish). Do not count use of products containing only CBD. On how many occasions (if any) have you used marijuana (smoking, vaping, edibles).

ICPSR Processing Information

Weighting Information

Frequency and percentage distributions displayed in codebooks produced after 2007 are unweighted, rather than weighted by variable ARCHIVE_WT (previously V5) as they had been in previous years. This change was made to simplify both the production of the codebooks and their interpretation by the analyst.

File Structure

MONITORING THE FUTURE: A CONTINUING STUDY OF AMERICAN YOUTH, 2023, GRADE 12, is available from ICPSR as seven logical record length datasets. Each dataset consists of SAS, SPSS, and Stata setup files containing all technical information for each variable in the corresponding data file, and the data file itself. The data are sorted by case. The datasets are organized by the form number (questionnaire version) used. For each part, the data are also available from ICPSR in the following formats: SAS transport (CPORT) file, SPSS system file, and Stata system file, with SAS and Stata supplemental syntax files, and a tab-delimited ASCII text file.

Part #	Form	# of variables	Logical record length	Unweighted N
1	Core (DS1)	198	414	7584
2	Form 1 (DS2)	630	1278	1256
3	Form 2 (DS3)	365	748	1274
4	Form 3 (DS4)	371	760	1264
5	Form 4 (DS5)	304	626	1258
6	Form 5 (DS6)	374	766	1281
7	Form 6 (DS7)	336	690	1251

APPENDICES

Appendix A: Citations

1. Miech, R. A., Johnston, L. D., Patrick, M. E., O'Malley, P. M., & Bachman, J. G. (2024). *Monitoring the Future national survey results on drug use, 1975-2023: Overview and detailed results for secondary school students (PDF)*. Ann Arbor: Institute for Social Research, The University of Michigan. Available for download at https://monitoringthefuture.org/results/annual-reports/.

2. Patrick, M. E., Miech, R. A., Johnston, L. D., & O'Malley, P. M. (2023). *Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 60, 1976-2022 (PDF).* Ann Arbor: Institute for Social Research, The University of Michigan. Available for download at https://monitoringthefuture.org/results/annual-reports/.

3. Bachman, J. G., Johnston, L. D., O'Malley, P. M., Schulenberg, J. E., & Miech, R. A. (2015). *The Monitoring the Future project after four decades: Design and procedures.* (Monitoring the Future Occasional Paper No. 82). Ann Arbor, MI: Institute for Social Research. 93 pp. Available for download at https://monitoringthefuture.org/results/other-publications/.

4. National Center for Education Statistics. (2023). Status Dropout Rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved 5 December 2023 from https://nces.ed.gov/programs/coe/indicator/coj.

5. Miech, R. A., Couper, M. P., Heeringa, S. G., & Patrick, M. E. (2021). The impact of survey mode on US national estimates of adolescent drug prevalence: Results from a randomized controlled study. *Addiction*, 116(5):1144-1151. doi:/10.1111/add.15249.

6. Miech, R., Leventhal, A., Johnston, L., O'Malley, P. M., Patrick, M. E., & Barrington-Trimis, J. (2021). Trends in Use and Perceptions of Nicotine Vaping Among US Youth From 2017 to 2020. *JAMA Pediatr*. 2021;175(2):185–190. doi:10.1001/jamapediatrics.2020.5667.

Appendix B: Sample Size and Student Response Rates

The three-stage sampling procedure described in the introduction yielded the following number of participating schools and students.

	Number of Public Schools	Number of Private Schools	Total Number of Schools	Total Number of Students	Student Response Rate*
1975	111	14	125	15,791	78%
1976	108	15	123	16,678	77
1977	108	16	124	18,436	79
1978	111	20	131	18,924	83
1979	111	20	131	16,662	82
1980	107	20	127	16,524	82
1981	109	19	128	18,267	81
1982	116	21	137	18,348	83
1983	112	22	134	16,947	84
1984	117	17	134	16,499	83
1985	115	17	132	16,502	84
1986	113	16	129	15,713	83
1987	117	18	135	16,843	84
1988	113	19	132	16,795	83
1989	111	22	133	17,142	86
1990	114	23	137	15,676	86
1991	117	19	136	15,483	83
1992	120	18	138	16,251	84
1993	121	18	139	16,763	84
1994	119	20	139	15,929	84
1995	120	24	144	15,876	84
1996	118	21	139	14,824	83
1997	125	21	146	15,963	83
1998	124	20	144	15,780	82
1999	124	19	143	14,056	83
2000	116	18	134	13,286	83
2001	117	17	134	13,304	82
2002	102	18	120	13,544	83
2003	103	19	122	15,200	83
2004	109	19	128	15,222	82
2005	108	21	129	15,378	82
2006	116	20	136	14,814	83
2007	111	21	132	15,132	81
2008	103	17	120	14,577	79
2009	106	19	125	14,268	82

Appendix B - Sample Size and Student Response Rates, continued.

	Number of Public Schools	Number of Private Schools	Total Number of Schools	Total Number of Students	Student Response Rate*
2010	104	22	126	15,127	85
2011	110	19	129	14,855	83
2012	107	20	127	14,343	83
2013	106	20	126	13,180	82
2014	105	17	122	13,015	82
2015	101	20	121	13,730	83
2016	100	20	120	12,600	80
2017	105	18	123	13,522	79
2018	106	23	129	14,502	81
2019	108	20	128	13,713	80
2020	29	7	36	3,770	79
2021	82	16	98	9,022	69
2022	80	22	102	9,599	75
2023	65	18	83	7,584	72

* The student response rate is derived by dividing the attained sample by the target sample (both based on weighted numbers of cases). The target sample is based upon listings provided by schools. Since such listings may fail to take account of recent student attrition, the actual response rate may be slightly underestimated.

Appendix C: MTF's Complex Sample Design and Combining Multiple Grades for Analysis

As the base year data - grades 8, 10 and 12 - are independently sampled using a multi-stage sampling design, it is often desirable to incorporate the complex sample design information into analyses. The MTF sample is drawn such that the data for each grade are representative of the 48 contiguous United States. The three stages of sampling are the geographic area, then the selection of one or more schools in the area, and then students within the school. (Please see *Sampling Information* earlier in this guide for more details.)

MTF includes an altered sampling weight, *V5 for 8th/10th grade* and *ARCHIVE_WT for 12th grade*, that should be included in all analyses. When analyzing data for a *single* grade, the sampling weights can be used as they appear in the data files. However, when researchers wish to include multiple grades in a single analysis, there are two sampling-related issues to address: weighting and clustering (stratum and cluster).

Weighting

Each grade is sampled independently and is a nationally-representative sample of the given grade. A probability sampling weight is constructed to generate weighted national estimates at the student level, accounting for both school selection and student subsampling as well as nonresponse within selected schools. The weight variables provided, *V5 for 8th/10th grade* and *ARCHIVE_WT for 12th grade*, are appropriate to use when analyzing data for a *single* grade.

When combining grades for analysis, it is necessary to adjust the probability sampling weight to take into account the different sizes of the 8th, 10th, and 12th grade populations. If each of the three grades had the same number of students in the U.S., then no adjustments would be necessary. In actuality, the number of students in 12th grade is typically smaller than the number in 8th and 10th grade (which are similar in size). In order for MTF estimates to represent the total 8th, 10th and 12th grade population, it is therefore necessary to modify the weights so that each grade has an influence on the analysis proportional to its size in the U.S. population.

To adjust the sampling weight for combined-grade analyses, we need to know the total size of the population from which the sample is selected and the sizes of each of the grade-specific populations that make up the total. The total frame size (TFS) is the size of the population from which the grade-specific samples are selected. The grade-specific frame size (GFS) is the size of population for a specific grade. MTF updates the TFS and GFS every four years. See Table 1 for details.

Table 1. Total Frame Size (TFS) and Grade-specific Frame Sizes (GFS) for all cycles of the MTF since 1991.

Cycle	Survey Years	Grade-specific sampling frame size (GFS)			Total Frame Size (TFS)
		8th	10th	12th	
1	1991 1992 1993 1994	3,420,000	3,240,000	2,870,000	9,530,000
2	1995 1996 1997 1998	3,269,256	3,280,256	2,938,114	9,487,626
3	1999 2000 2001 2002	3,774,722	3,444,897	2,885,324	10,104,943
4	2003 2004 2005 2006	3,899,699	3,764,581	3,118,962	10,783,242
5	2007 2008 2009 2010	4,267,771	4,002,331	3,312,853	11,582,955
6	2011 2012 2013 2014	4,181,154	4,260,398	3,567,159	12,008,711
7	2015 2016 2017 2018	3,996,287	4,179,424	3,654,099	11,829,810
8	2019 2020 2021 2022 2023*	4,110,489	4,255,843	3,737,846	12,104,178

* Sampling frame extended one year due to the COVID year in 2020

With the information about total and grade-specific form sizes for each cycle of the MTF sample, the Weighting Correction Factor (WCF) for each year and grade can be calculated. The WCF is simply the proportion of the total sample represented by the grade, or GFS/TFS. Table 2 provides the WCF values for the eight cycles of the MTF.

Table 2. Weighting correction factors for each cycle of the MTF

Cycle	Survey Years	Weighting Correction factor (WCF)		
		8th	10th	12th
1	1991 1992 1993 1994	0.358866737	0.339979014	0.301154250
2	1995 1996 1997 1998	0.344581036	0.345740441	0.309678522
3	1999 2000 2001 2002	0.373552033	0.340912067	0.285535901
4	2003 2004 2005 2006	0.361644392	0.349114023	0.289241584
5	2007 2008 2009 2010	0.368452696	0.345536264	0.286011039
6	2011 2012 2013 2014	0.348176753	0.354775629	0.297047618
7	2015 2016 2017 2018	0.337814978	0.353295953	0.308889069
8	2019 2020 2021 2022 2023*	0.339592577	0.351601158	0.308806265

* Sampling frame extended one year due to the COVID year in 2020

Examples for creating combined sampling weight variables for analysis

Single year - all grades

Analyses combining 8th, 10th, and 12th grade students in 2018 would include the following code for each of the three grades. This syntax creates the combined weight variable, `v5c`, with `grade` having the values 8, 10, 12; `v1`=year of administration; `V5 or ARCHIVE_WT`=MTF sampling weight for grades 8/10 and 12, respectively. The weighting correction factors (`0.3378, 0.3533, and 0.3089`) for grades 8, 10 and 12, respectively, are found in Table 2 and included in the calculation as multipliers of the MTF sampling weight:

```
if grade =  8 and v1 = 2018 then v5c = 0.3378*V5
if grade = 10 and v1 = 2018 then v5c = 0.3533*V5
if grade = 12 and v1 = 2018 then v5c = 0.3089*ARCHIVE_WT
```

For analysis, a statement such as `weight=v5c` would then be used to incorporate the combined weight variable that has been adjusted to reflect the proportion of the sample represented by each grade.

Multiple years - all grades

Analysis including multiple years of data would require the inclusion of additional recode statements with the desired years and corresponding weighting correction factors (see Table 2). For example, combining grades 8, 10 and 12 for 2018 and 2019 would include the following code to create the combined weight variable, `v5c`:

```
if grade =  8 and v1 = 2018 then v5c = 0.3378*V5
if grade = 10 and v1 = 2018 then v5c = 0.3533*V5
if grade = 12 and v1 = 2018 then v5c = 0.3089*ARCHIVE_WT

if grade =  8 and v1 = 2019 then v5c = 0.3396*V5
if grade = 10 and v1 = 2019 then v5c = 0.3516*V5
if grade = 12 and v1 = 2019 then v5c = 0.3088*ARCHIVE_WT
```

For analysis, a statement such as `weight=v5c` would then be used to incorporate the combined weight variable that has been adjusted to reflect the proportion of the sample represented by each grade.

Single year - combining two grades

Analyses that include only two of the three grades would use the weighting correction factors in Table 2 and some algebra to get the appropriate combined sampling weight.

To determine the combined sampling weight for the each of the grades included in the analytic sample, the weighting correction factor is calculated as the proportion of each grade-specific frame size in relation to the combined grade-specific frame sizes of interest. This means a calculation such as this is needed:

```
WCF[one grade] / (WCF[one grade] + WCF[other grade])
```

The resulting value from this calculation would then be multiplied by the MTF sampling weight (`V5` or `ARCHIVE_WT`, as appropriate) to get the combined sampling weight (`v5c`) to be used in analysis.

For example, using the 2018 weighting correction factors in Table 2, an analysis that included only 8th and 12th grade data would compute a new weighting correction factor as follows, where `0.3378` is the weighting correction factor for 8th graders in 2018 and `0.3098` is the weighting correction factor for 12th graders in 2018:

```
if grade = 8 and v1=2018 then v5c = (0.3378 / (0.3378 + 0.3089))*V5
if grade =12 and v1=2018 then v5c = (0.3089 / (0.3378 + 0.3089))*ARCHIVE_WT
```

If the analyst chooses to do the calculations, for analyses using grades 8 and 12 in 2018, the new weighting correction factor for 8th grade would be `0.52`(which is `0.34/(0.34+0.31`), and for 12th grade it would be `0.48`(which is `0.31/(0.34+0.31`).

For analysis, a statement such as `weight=v5c` would then be used to incorporate the combined weight variable that has been adjusted to reflect the proportion of the sample represented by each grade.

Multiple years - two grades

Analysis of multiple years and only two grades would include additional recodes with the desired years and grades, an expansion of what is needed for combining two grades in a single year.

For example, using 8th and 12th grades for 2018 and 2019, the following statements are needed to calculate the appropriate weighting correction factors:

```
if grade =  8 and v1=2018 then v5c = (0.3378 / (0.3378 + 0.3089))*V5
if grade = 12 and v1=2018 then v5c = (0.3089 / (0.3378 + 0.3089))*ARCHIVE_WT

if grade =  8 and v1=2019 then v5c = (0.3396 / (0.3396 + 0.3088))*V5
if grade = 12 and v1=2019 then v5c = (0.3088 / (0.3396 + 0.3088))*ARCHIVE_WT
```

For analysis, a statement such as `weight=v5c` would then be used to incorporate the combined weight variable that has been adjusted to reflect the proportion of the sample represented by each grade.

Special case: When the proportion of students that receive a survey question differs by grade

In some cases, the proportion of students who receive a question differs across grades. For example, take the MTF question on failed attempts to quit cigarettes, which is “Have you ever tried to stop smoking cigarettes and found that you could not?” For 8th and 10th grade students, 100% received this question since 1991. In 12th grade only a randomly-selected 1/6 received this question from 1991 to 1996, and a randomly-selected 1/3 received it from 1997 onward.

Correct adjustment of weights for analysis that combines all grades first requires modification as described in the sections above when creating `v5c`. In addition, the weights (`v5c`) then need to be further adjusted to compensate for unequal proportions receiving the question across grades. In the example above for the question “Have you ever tried to stop smoking cigarettes and found that you could not?” one way to accomplish this is with the code:

```
if grade = 12 and v1 > 1990 and v1 < 1997 then v5c=v5c*6
if grade = 12 and v1 > 1996 then v5c=v5c*3
```

To understand the rationale for this adjustment, it is useful to think of each MTF respondent as representing a larger number of students in the total population (an average of ~250 in a typical year). If an analysis pool contains 100% of 8th and 10th grade students but only 1/3 of 12th grade students, then 2/3 of the 12th grade students in the total population are not represented. One remedy in this case is to upweight the 12th grade students who did receive the question by a factor of three (the reciprocal of the proportion that received the question).

Note that this additional adjustment is only needed when the proportion sampled differs across grades. For example, if all grades consisted of only a 1/3, randomly-selected sample for a given survey item, then only the adjustments noted in "Single year-all grades" or "Multiple year-all grades" is needed, and no further adjustment is necessary.

For analysis, a statement such as `weight=v5c` would then be used to specify the combined weight variable that has been adjusted to reflect the proportion of the sample represented by each grade *and* the proportion of each grade that received a particular survey item.

Examples: Specifying the created combined weight variable, v5c, when combining multiple grades for analyses using SAS v9.4 and Stata

SAS	Stata
One year of data - descriptives	
- Note the **DOMAIN** statement to obtain means by grade	- Note the **over** statement to obtain means by grade

`TITLE "Means Analysis:30day alcohol use 2017-all grades" ;`
 	
`PROC SURVEYMEANS DATA = oneyear_allgrades_data ;`
`WEIGHT v5c ;`
`DOMAIN grade ;`
`VAR ALC30DAY ;`
`RUN ;`
	`* Means Analysis:30day alcohol use 2017-all grades`
	
	`use oneyear_allgrades_data`
	
	`svyset [pweight=v5c], vce(linearized)`
	`singleunit(missing)`
	
	`svy: mean alc30day, over(grade)`

Multiple years of data - descriptives	

`TITLE "Means Analysis:30day alcohol use, grade by year" ;`
 	
`PROC SURVEYMEANS DATA = multiyr_allgrades_data;`
`WEIGHT v5c ;`
`DOMAIN GRADE*YEAR ;`
`VAR ALC30DAY;`
`RUN ;`
	`* Means Analysis:30day Alcohol use, grade by year`
	
	`use multiyr_allgrades_data`
	
	`svyset [pweight=v5c], vce(linearized)`
	`singleunit(missing)`
	
	`svy: mean alc30day`
	`svy: mean alc30day, over(grade year)`

Multiple years of data - analysis model	

`TITLE "SURVEYLOGISTIC:trends for 30day alcohol use adjusted by grade w/year contrasts";`
 	
`PROC SURVEYLOGISTIC DATA = multiyr_allgrades_data;`
`WEIGHT v5c ;`
`CLASS YEAR(ref='2017') GRADE(ref='8') / PARAM=glm;`
`MODEL ALC30DAY (EVENT='1') = YEAR GRADE / CLODDS CLPARM;`
`CONTRAST 'YEAR 2018 vs. 2019' YEAR 1 -1 0/ estimate=exp;`
`RUN ;`
	`* LOGISTIC:trends for 30day alcohol use adjusted by grade w/year contrasts`
	
	`use multiyr_allgrades_data`
	
	`svyset [pweight=v5c], vce(linearized)`
	`singleunit(missing)`
	
	`xi:svy : logistic alc30day i.year i.grade`
	`lincom _Iyear_2018 - _Iyear_2019`

Clustering

As the MTF samples are drawn using a 3-stage sampling procedure, it is most technically correct to include all sampling-related variables in analyses. Variables are maintained by MTF to account for the sampling design; however, these design variables, stratum and cluster, are omitted from the public use data files for reasons of confidentiality.

For researchers who wish to incorporate the complex sample design (stratum, cluster) and the unaltered sampling weight variables in their work, these variables are now available through restricted access from NAHDAP. Please see Monitoring the Future (MTF) Restricted-Use Cross-Sectional Datasets available through NAHDAP for more information.

Appendix D: Randomization of question sets

In an effort to shorten the length of the surveys, an experiment was conducted such that "blocks" of questions were asked of some respondents and not others. Each survey had two blocks that were randomly assigned within form to a respondent. The blocks are labeled "blue" and "orange". This appendix details the questions in each block for each form of the 2021 survey.

Form 1, BLUE block

Item Number	Variable Label	Variable Number	Question Text
01200	US NEEDS PLANNG	V1634	How much do you agree or disagree with each of the following statements? The nation needs much more long-range planning and coordination to be prepared for the future
01210	ENJOY FAST PACE	V1635	How much do you agree or disagree with each of the following statements? I enjoy the fast pace and changes of today's world
01220	THG CHG 2 QUICK	V1636	How much do you agree or disagree with each of the following statements? Things change too quickly in today's world
01230	X AHEAD TOUGHER	V1637	How much do you agree or disagree with each of the following statements? I think the times ahead for me will be tougher and less fun than things are now
01240	TM SPT ADLT MST	V1638	Of all the time you spend with other people, about how much is spent with people over 30?
01250	LK MR TM ADLT	V1639	Would you like to spend more time, or less time, with people over 30 if you could?
01260	LK MR TM YG CHD	V1640	Would you like to spend more time, or less time, working with or helping younger children?

Form 1, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
How important is each of the following to you in your life?			
01410	IMP B SUCCSS WK	V1655	Being successful in my line of work
01420	IMP GD MRRG+FAML	V1656	Having a good marriage and family life
01430	IMP LOTS OF $	V1657	Having lots of money
01440	IMP TM RCRN+HBY	V1658	Having plenty of time for recreation and hobbies
01450	IMP STRG FRDSHP	V1659	Having strong friendships
01460	IMP STEADY WORK	V1660	Being able to find steady work
01470	IMP CNTRBTN SOC	V1661	Making a contribution to society
01480	IMP LDR COMUNTY	V1662	Being a leader in my community
01490	IMP CHLD BTR OP	V1663	Being able to give my children better opportunities than I've had
01500	IMP LIV CLS PRNT	V1664	Living close to parents and relatives
01510	IMP GT AWY AREA	V1665	Getting away from this area of the country
01520	IMP CRRCT INEQL	V1666	Working to correct social and economic inequalities
01530	IMP NEW XPRNCE	V1667	Discovering new ways to experience things
01540	IMP FND PRPS LF	V1668	Finding purpose and meaning in my life

Item Number	Variable Label	Variable Number	Question Text
01550	PPL CAN B TRSTD	V1669	Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?
01560	PPL TRY B HLPFL	V1670	Would you say that most of the time people try to be helpful or that they are mostly just looking out for themselves?
01570	PPL TRY BE FAIR	V1671	Do you think most people would try to take advantage of you if they got a chance or would they try to be fair?
	These next questions ask your opinions about a number of different topics. How much do you agree or disagree with each statement below?		
01580	-OBY LW=-GD CTZN	V1672	I feel that you can't be a good citizen unless you always obey the law
01590	GD CTZN ALG GOVT	V1673	I feel good citizens should go along with whatever the government does even if they disagree with it
01600	GD CTZN CHG GOVT	V1674	I feel good citizens try to change the government policies they disagree with
01610	VOTE->MAJ IMPCT	V1675	The way people vote has a major impact on how things are run in this country
01620	CTZN GRP HV EFCT	V1676	People who get together in citizen action groups to influence government policies can have a real effect
01630	OUR SYST ST BS	V1677	Despite its many faults, our system of doing things is still the best in the world
01640	US NEEDS GROWTH	V1678	America needs growth to survive, and that is going to require some increase in pollution
01650	LV THNGS TO GOD	V1679	If we just leave things to God, they will turn out for the best
01670	DO WL SC IMP/JB	V1681	Doing well in school is important for getting a good job

Form 2, BLUE block

Item Number	Variable Label	Variable Number	Question Text
How much do you agree or disagree with each of the following statements?			
05990	US 2 MUCH PROFIT	V2225	In the United States, we put too much emphasis on making profits and not enough on human well-being
06000	2MUCH CNCRN MTRL	V2226	People are too much concerned with material things these days
06010	ENCOURG PPL BUY>	V2227	Since it helps the economy to grow, people should be encouraged to buy more
06020	-WRNG ADVERTISNG	V2228	There is nothing wrong with advertising that gets people to buy things they don't really need
06030	MOR SHORTGS FUTR	V2229	There will probably be more shortages in the future, so Americans will have to learn how to be happy with fewer "things"
06120	DFNTLY PRFR MATE	V2238	Do you think that you would prefer having a mate for most of your life, or would you prefer not having a mate?
06130	THINK WILL MARRY	V2239	Which do you think you are most likely to choose in the long run?
06140	LIKLY STAY MARRD	V2240	If you did get married (or are married) . . . How likely do you think it is that you would stay married to the same person for life?
06150	LIKLY HAVE KIDS	V2241	If you did get married (or are married) . . . How likely is it that you would want to have children?

Form 2, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
06330	INTEREST IN GOVT	V2259	Some people think about what's going on in government very often, and others are not that interested. How much of an interest do you take in government and current events?
06340	GOVT PPL -DSHNST	V2260	Do you think some of the people running the government are crooked or dishonest?
06350	GOVT DSNT WASTE$	V2261	Do you think the government wastes much of the money we pay in taxes?
06360	NEVER TRUST GOVT	V2262	How much of the time do you think you can trust the government in Washington to do what is right?
06370	GVT PPL DK DOING	V2263	Do you feel that the people running the government are smart people who usually know what they are doing?
06380	GOVT RUN FOR PPL	V2264	Would you say the government is pretty much run for a few big interests looking out for themselves, or is it run for the benefit of all the people?
	Have you ever done, or do you plan to do, the following things?		
06390	DO OR PLN VOTE	V2265	Vote in a public election
06400	DO OR PLN WRITE	V2266	Write to public officials
06410	DO OR PLN GIVE $	V2267	Give money to a political candidate or cause
06420	DO OR PLN WK CPG	V2268	Work in a political campaign
06430	DO OR PLN DEMNST	V2269	Participate in a lawful demonstration
06440	DO OR PLN BOYCOT	V2270	Boycott certain products or stores

Form 3, BLUE block

Item Number	Variable Label	Variable Number	Question Text
08250	FRNDS AL OT RC	V3242	What race are your close friends?
08260	NGBHD AL OT RC	V3243	What race are the people in your neighborhood?
08270	ELEMSCH AL OT RC	V3244	What race were the students in the elementary school where you spent the most time?
08280	HISCH AL OT RC	V3245	What race are the students in your present school?
08290	WRKRS AL OT RC	V3246	What race are the people that you work with on your job (if you have a job)?
08300	DO LOT THG OT RC	V3247	How often do you do things (like having a conversation, eating together, playing sports) with people of other races?
	Now we'd like you to make some ratings of how good or bad a job you feel each of the following organizations is doing for the country as a whole. For each one, mark the circle that best describes how you feel. How good or bad a job is being done for the country as a whole by. . .		
08380	GD JB LARG CORPS	V3255	Large corporations?
08390	GD JB LBR UNIONS	V3256	Major labor unions?
08400	GD JB COLLG+UNIV	V3257	The nation's colleges and universities?
08410	GD JB PBLC SCHOL	V3258	The nation's public schools?
08420	GD JB CHURCHES	V3259	Churches and religious organizations?
08430	GD JB NEWS MEDIA	V3260	The national news media (TV, magazines, news services)?
08440	GD JB PRES+ADMIN	V3261	The President and the administration?
08450	GD JB CONGRESS	V3262	Congress—that is, the U.S. Senate and House of Representatives?
08460	GD JB SUPRM CRT	V3263	The U.S. Supreme Court?
08470	GD JB JUSTC SYST	V3264	All the courts and the justice system in general?
08480	GD JB POLICE	V3265	The police and other law enforcement agencies?
08490	GD JB MILITARY	V3266	The U.S. military?

Form 3, BLUE block, continued

Item Number	Variable Label	Variable Number	Question Text
08500	MIL TOO MCH INFL	V3267	All things considered, do you think the armed services presently have too much or too little influence on the way this country is run?
08510	US TOO MCH$ MILT	V3268	Do you think the U.S. spends too much or too little on the armed services?

Form 3, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
	The next questions are about climate change and the environment. How much do you agree or disagree with each statement below?		
38290	CLIM CHNG INCREASED	V3648	The effects of climate change have gotten worse in the last ten years
38410	GOVT DEAL CLIM CHNG	V3649	Government should take steps to deal with climate change problems, even if it means that most of us pay higher prices or taxes
38280	MR$ FR LAST THG CLIM CHNG	V3650	I would prefer to pay more money for things that will last a long time, rather than have them cost less and break sooner
38420	BYC/MAS TRAN CLIM CHNG	V3651	I would be willing to (or already do) use a bicycle or mass transit (if available) rather than a car
38430	EST -MEAT +VEG	V3652	I would be willing to (or already do) eat less or no meat
38440	CLIM CHNG THREAT	V3653	Climate change is a serious threat to our future

Form 3, ORANGE block, continued

Item Number	Variable Label	Variable Number	Question Text
	In the following list you will find some statements about leisure time and work. Please show whether you agree or disagree with each statement.		
08050	LIK WRK CAN FRGT	V3222	I like the kind of work you can forget about after the work day is over
08060	WRK=ONLY MK LVNG	V3223	To me, work is nothing more than making a living
08070	WRK CNTRL PRT LF	V3224	I expect my work to be a very central part of my life
08080	OVTM 2DO BST JOB	V3225	I want to do my best in my job, even if this sometimes means working overtime
08090	SAME JOB MST LIF	V3226	I would like to stay in the same job for most of my adult life
08350	# CHLDN WANT(6+)	V3252	All things considered, if you could have exactly the number of children you want, what number would you choose to have?

Form 4, BLUE block

08100	ENUF$,NT WNT WRK	V4263	If you were to get enough money to live as comfortably as you'd like for the rest of your life, would you want to work?
10320	KIND OF WORK @30	V4248	What kind of work do you think you will be doing when you are 30 years old? Mark the one that comes closest to what you expect to be doing
10330	R SURE GT THS WK	V4249	How likely do you think it is that you will actually get to do this kind of work?
10340	R SURE WK GD CHC	V4250	How certain are you that this kind of work is a good choice for you?
10350	R THNK WK BE SAT	V4251	How satisfying do you think this kind of work will be for you?

Form 4, BLUE block, continued

Item Number	Variable Label	Variable Number	Question Text
	To what extent do you think the things listed below will prevent you from getting the kind of work you would like to have?		
10360	JOB OBSTC RELGN	V4252	Your religion
10370	JOB OBSTC SEX	V4253	Your sex
10380	JOB OBSTC RACE	V4254	Your race
10390	JOB OBSTC BKGRND	V4255	Your family background
10400	JOB OBSTC POL VW	V4256	Your political views
10410	JOB OBSTC EDUCTN	V4257	Your education
10420	JOB OBSTC -VOC T	V4258	Lack of vocational training
10430	JOB OBSTC -ABLTY	V4259	Lack of ability
10440	JOB OBSTC - PULL	V4260	Not knowing the right people
10450	JOB OBSTC -WK HD	V4261	Not wanting to work hard
10460	JOB OBSTC -CONFM	V4262	Not wanting to conform

Form 4, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
06330	INTEREST IN GOVT	V4274	Some people think about what's going on in government very often, and others are not that interested. How much of an interest do you take in government and current events?
06880	THK ABT SOC ISSU	V4212	Some people think a lot about the social problems of the nation and the world, and about how they might be solved. Others spend little time thinking about these issues. How much do you think about such things?
09940	FUTR CNTRY WORSE	V4209	Looking ahead to the next five years, do you think that things in this country will get better or worse?
09950	FUTR WORLD WORSE	V4210	Looking ahead to the next five years, do you think that things in the rest of the world will get better or worse?
09960	FUTR R LIFE WRSE	V4211	How do you think your own life will go in the next five years—do you think it will get better or worse?
10080	R EFRT 2 HLP ENV	V4224	In your own actions—the things you buy and the things you do—how much of an effort do you make to conserve energy and protect the environment?
10560	#BKS LAST YR/10+	V4273	In the past year, how many books have you read just because you wanted to—that is, without their being assigned?

Item Number	Variable Label	Variable Number	Question Text
	Some people think that there ought to be changes in the amount of influence and power that certain organizations have in our society. Do you think the following organizations should have more influence, less influence, or about the same amount of influence as they have now? How much influence should there be for . .		
10570	>INFLC LARG CORP	V4275	. . . Large corporations?
10580	>INFLC LBR UNION	V4276	. . . Major labor unions?
10590	>INFLC CHURCHES	V4277	. . . Churches and religious organizations?
10600	>INFLC NEWS MDIA	V4278	. . . The national news media (TV, magazines, news services)?
10610	>INFLC PRES+ADMN	V4279	. . . The Presidency and the administration?
10620	>INFLC CONGRESS	V4280	. . . The Congress—that is, the U.S. Senate and House of Representatives?
10630	>INFLC SUPRM CRT	V4281	. . . The U.S. Supreme Court?
10640	>INFLC JUSTC SYS	V4282	. . . All the courts and the justice system in general?
10650	>INFLC POLICE	V4283	. . . The police and other law enforcement agencies?
10660	>INFLC MILITARY	V4284	. . . The U.S. military?
32740	DINNER W/PARENT	V4465	During a typical week, how often do you have dinner with one or both of your parents?

Form 4, ORANGE block, continued

Item Number	Variable Label	Variable Number	Question Text
	These questions are about climate change and the environment. Please select the answer that shows how much you agree or disagree with each statement below.		
38130	CLIM CHNG NEC 4 GRTH	V4495	America needs growth to survive, and that is going to require some increase in climate change
38290	CLIM CHNG INCREASED	V4493	The effects of climate change have gotten worse in the last ten years.
38300	CLIM CHNG NT SO DANG	V4494	The dangers of climate change are not really as great as government, the media, and environmental groups would like us to believe
38320	INDVL RESP 4 CLIM CHNG	V4496	People will have to change their buying habits and way of life to correct climate change problems
38330	GOVT TAX CLIM CHNG	V4498	Government should place higher taxes on products which cause climate change in their manufacture or disposal, so that companies will be encouraged to find better ways to produce them
38340	GOVT BAN DSPSBLE CLIM CHNG	V4499	I wish that government would ban throwaway bottles and beverage cans
38350	TV COMM CRT NDS CLIM CHNG	V4500	Advertisements stimulate people to buy a lot of things they don't really need
38360	TV COMMRCLS GOOD CLIM CHNG	V4501	Advertisements do a lot of good by showing new products that we might not know about otherwise
38370	FAM BUYS THG -ND CLIM CHNG	V4502	My family and I often buy things we really don't need; we could get along with much less
38380	CLIM CHNG SLVD 25 YR	V4503	Within the next 25 years, engineers and scientists will probably have invented devices that will solve climate change
38440	CLIM CHNG THREAT	V4504	Climate change is a serious threat to our future
38450	GOVT ACTION CLIM CHNG	V4497	Government should take action to solve our climate change problems even if it means that some of the products we now use would have to be changed or banned

Form 5, BLUE block

Item Number	Variable Label	Variable Number	Question Text
06330	INTEREST IN GOVT	V5266	Some people think about what's going on in government very often, and others are not that interested. How much of an interest do you take in government and current events?
12010	RDCE HEAT R'S HM	V5246	In the house or apartment where you live, is an effort made to reduce heat during the winter, in order to save energy?
12020	ENJOY SHOPPING	V5247	How do you feel about each of the following? How much do you enjoy shopping for things like clothes, music, videos, sporting goods, and books?
12030	CARE LATST FASHN	V5248	How do you feel about each of the following? How much do you care about having the latest fashion in your clothes, music, videos, leisure activities, and so on?
12040	CR FAM HV NBR HV	V5249	How do you feel about each of the following? How much do you care about whether your family has most of the things your friends and neighbors have?
12050	XPCT 2 OWN>PRNTS	V5250	When you are older, do you expect to own more possessions than your parents do now, or about the same, or less? I expect to own . . .
12060	LST CNT OWN>PRNT	V5251	Compared with your parents, what is the smallest amount that you could be content or satisfied to own? The least I could be content to own is . . .

Item Number	Variable Label	Variable Number	Question Text
	These next questions ask your opinions about a number of different topics. How much do you agree or disagree with each statement below? (Mark one circle for each line.)		
12070	WRRY ABT OW CTRY	V5252	We ought to worry about our own country and let the rest of the world take care of itself
12080	BTTR IF CTZ WRLD	V5253	It would be better if we all felt more like citizens of the world than of any particular country
12090	-SYMP TWD STARVG	V5254	I find it hard to be sympathetic toward starving people in foreign lands, when there is so much trouble in our own country
12100	MNRTY NT MY BSNS	V5255	Maybe some minority groups do get unfair treatment, but that's no business of mine
12110	UPST PL TR -FAIR	V5256	I get very upset when I see other people treated unfairly
12120	HELP POOR W MY $	V5257	I would agree to a good plan to make a better life for the poor, even if it cost me money
12130	-MY PRB OT ND HP	V5258	It's not really my problem if others are in trouble and need help
12140	RB CHNG ETG HABT	V5259	Americans could change their eating habits to provide more food for the hungry people in other parts of the world, and at the same time be healthier themselves
10060	FAM BUYS THG -ND	V5260	My family and I often buy things we really don't need; we could get along with much less

Form 5, BLUE block, continued

Item Number	Variable Label	Variable Number	Question Text
	If you have at least an average income in the future, how likely is it that you will contribute money to the following organizations? If you have already contributed, mark the last circle only. Are you likely to contribute to...		
12200	CTB TO UNTD FUND	V5267	The United Way or other community charities?
12210	CTB TO INTL RELF	V5268	... International relief organizations (CARE, UNICEF, etc.)?
12220	CTB TO MNRTY GRP	V5269	... Minority group organizations (NAACP, SCLC, BLM, etc.)?
12230	CTB TO RELGS ORG	V5270	... Church or religious organizations?
12240	CTB TO PLTCL PTY	V5271	... Political parties or organizations?
12250	CTB TO CTZN LBBY	V5272	... Citizen lobbies (Common Cause, Public Citizen, etc.)?
12260	CTB TO VS DISEAS	V5273	... Charities to help fight diseases (Cancer, Heart Disease, etc.)?
12270	CTB TO POP PRBMS	V5274	... Organizations concerned with overpopulation?
12280	CTB TO ENVIR PBM	V5275	... Organizations concerned with climate change and environmental problems (Sierra Club, Friends of Earth, etc.)?

Form 5, BLUE block, continued

Item Number	Variable Label	Variable Number	Question Text
	How often do you . . .		
20740	OFTN EAT BRKFST	V5503	Eat breakfast?
20750	OFTN EAT GN VEG	V5504	Eat at least some green vegetables?
20760	OFTN EAT FRUIT	V5505	Eat at least some fruit?
20770	OFTN EXERCISE	V5506	Exercise vigorously (jogging, swimming, calisthenics, or any other active sports)?
20780	OFTN 7HRS SLEEP	V5507	Get at least seven hours of sleep?
20790	OFTN SLEEP <SHLD	V5508	Get less sleep than you think you should?

Form 5, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
06880	THK ABT SOC ISSU	V5209	Some people think a lot about the social problems of the nation and the world, and about how they might be solved. Others spend little time thinking about these issues. How much do you think about such things?
08100	ENUF$,NT WNT WRK	V5233	If you were to get enough money to live as comfortably as you'd like for the rest of your life, would you want to work?
	Of all the problems facing the nation today, how often do you worry about each of the following?		
11660	WR/NT NUCLER WAR	V5210	Chance of nuclear war
11670	WR/NT POP GROWTH	V5211	Overpopulation
11680	WR/NT CRIME+VLNC	V5212	Crime and violence
38390	WR/NT CLIM CHNG	V5631	Climate change

Form 5, ORANGE block, continued

Item Number	Variable Label	Variable Number	Question Text
	Of all the problems facing the nation today, how often do you worry about each of the following?		
11700	WR/NT ENRGY SHRT	V5214	Energy shortages
11710	WR/NT RACE RELTN	V5215	Race relations
11720	WR/NT HNGR+PVRTY	V5216	Hunger and poverty
11730	WR/NT USE OPN LD	V5217	Using open land for housing or industry
11740	WR/NT URBN DECAY	V5218	Urban decay
11750	WR/NT ECON PRBLM	V5219	Economic problems
11760	WR/NT DRUG ABUSE	V5220	Drug abuse
	Apart from the particular kind of work you want to do, how would you rate each of the following settings as a place to work?		
11800	PLC WRK LG CORPN	V5224	Working in a large corporation
11810	PLC WRK SM BSNSS	V5225	Working in a small business
11820	PLC WRK GVT AGCY	V5226	Working in a government agency
11830	PLC WRK MLTY SVC	V5227	Working in the military service
11840	PLC WRK SCH/UNIV	V5228	Working in a school or university
11850	PLC WRK PLC DEPT	V5229	Working in a police department or police agency
11860	PLC WRK SOC SVCS	V5230	Working in a social service organization
11870	PLC WRK SML GRP	V5231	Working with a small group of partners
11880	PLC WRK SLF EMPL	V5232	Working on your own (self-employed)

Form 5, ORANGE block, continued

Item Number	Variable Label	Variable Number	Question Text
	The next questions are about race relations. How much have you gotten to know people of other races		
11890	RCL CNTCT SCHOOL	V5234	. . . In school?
11900	RCL CNTCT NGHBHD	V5235	. . . In your neighborhood?
11910	RCL CNTCT CHURCH	V5236	. . . In church?
11920	RCL CNTCT SPORTS	V5237	. . . On sports teams?
11930	RCL CNTCT CLUBS	V5238	. . . In clubs?
11940	RCL CNTCT JOB	V5239	. . . On a job?
11950	B/W RLTNS WRSE	V5240	Thinking about the country as a whole, would you say relations between White people and Black people have been getting better, getting worse, or staying pretty much the same?
	These questions are about whether you think women are discriminated against in each of the following areas. To what extent are women discriminated against		
12290	DSCM WN COLLG ED	V5277	. . . In getting a college education?
12300	DSCM WN LDRSHP	V5278	. . . In gaining positions of leadership over men and women?
12310	DSCM WN EXEC/BSN	V5279	. . . In obtaining executive positions in business?
12320	DSCM WN TOP/PRFN	V5280	. . . In obtaining top jobs?
12330	DSCM WN SKL LABR	V5281	. . . In getting skilled labor jobs?
12340	DSCM WN PLTCL OF	V5282	. . . In getting elected to political office?
12350	DSCM WN =PAY =WK	V5283	. . . In getting equal pay for equal work?

Form 6, BLUE block

Item Number	Variable Label	Variable Number	Question Text
To what extent have you participated in the following school activities during this school year?			
22170	SCH ACTV-PBLCTNS	V6251	School newspaper or yearbook
22180	SCH ACTV-PRF ART	V6252	Music or other performing arts
22190	SCH ACTV-ATHLTCS	V6253	Athletic teams
22200	SCH ACTV-OTH ACT	V6256	Other school clubs or activities
23360	SCH ATV-ACDMC CL	V6254	Academic clubs (e.g., science, math, language)
23370	SCH ATV-STDN GVT	V6255	Student council or government
How often do your parents (or stepparents or guardians) do the following?			
25180	#X PRNT CHK HMWK	V6491	Check on whether you have done your homework
25190	#X PRNT HLP HMWK	V6492	Provide help with your homework when it's needed
25200	#X PRNT GV CHORE	V6493	Require you to do work or chores around the home
25220	#X PRNT LMT OUT	V6495	Limit the amount of time you can go out with friends on school nights
38090	#X PRNT LIMIT SCRN TIME	V7886	Limit the amount of your screen time (such as video games, social media, TV/movies, etc.)

Form 6, ORANGE block

Item Number	Variable Label	Variable Number	Question Text
23530	EVER HELD BACK	V6272	Have you ever had to repeat a grade in school?
23540	NEED SUMMER SCHL	V6273	Did you ever attend summer school to make up for poor grades or to keep from being held back?
25140	EVER SUSPENDED	V6496	Have you ever been suspended or expelled from school?
29590	#DA GUN SCHL/4WK	V6507	During the LAST FOUR WEEKS, on how many days (if any) did you carry a gun to school?