

Results of Cognitive Testing of Questions on Teen Alcohol and Marijuana Use for the Youth Risk Behavior Survey

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I. Introduction

This report summarizes the findings of a cognitive interview study to test questions on alcohol and marijuana consumption by teens for use in The Youth Risk Behavior Surveillance System (YRBSS). The YRBSS monitors high priority health-risk behaviors among high school students, including alcohol use. The system includes a national survey that is conducted by CDC, as well as state and local surveys that are coordinated by state and local education and public health agencies in collaboration with other partners (Centers for Disease Control and Prevention). State and local Youth Risk Behavior Surveys (YRBSS) include core questions on alcohol and other topics as well as state/local optional questions.

This evaluation is based on 20 cognitive interviews that were conducted by a team of researchers from the Center for Questionnaire Design and Evaluation Research (CCQDER) at the National Center for Health Statistics between November 2017 and January 2018.

The following report details the methods used in this question evaluation study and presents an in-depth question-by-question review of the findings. The complete instrument, as tested, is presented in Appendix A.

II. Summary of Findings

The teens in this sample demonstrated distinct consumption patterns for both alcohol and marijuana. Some of these patterns have implications for measurement error when asking teens about their consumption of alcohol and marijuana.

Most teens reported that they occasionally drank a small amount of alcohol (2 beers or less). A few teens reported drinking large amounts of alcohol (4 drinks or more) only a couple of times and a few more reported drinking large amounts of alcohol relatively frequently (at least once every weekend).

In contrast to patterns seen in a previous study of adult drinkers, teens' drinking was variable in nature rather than regular (Massey, 2017). Many adults demonstrated habitual patterns of consumption such as drinking 3 beers every Wednesday at happy hour or drinking a glass of wine every night with dinner. None of the teens demonstrated habitual patterns in frequency, location or type of alcohol consumed.

The teens drank alcohol almost exclusively on weekends when they were free to gather with friends under relatively little parental supervision and when they did not have to worry about being at school the next day. Most teens did not drink every weekend but rather occasionally, for example, when a friend happened to have some alcohol. In contrast, adult drinking tended to be relatively more spread out across the week and more clustered around special occasions such as birthdays or holidays.

The teens drank in locations of convenience- a house without parents, a park. Whereas adults tended to drink at home or in bars, these locations were not generally open to teens although a few of the teens were able to drink at home either because they had permissive parents or because they lived on their own.

Whereas adults are free to choose the type of alcohol they want to consume, the teens were constrained by the type of alcohol that was available to them. Teens were often given alcohol by friends and family, and thus, were not able to choose. A few teens reported having fake IDs or having friends with fake IDs and these teens had more autonomy over what they drank.

The lack of regularity in the teens' drinking made it somewhat difficult for them to answer questions about frequency. As with adults, teens who drank very infrequently had an easier time answering frequency questions because they were able to recall specific events. For example, one teen reported having drunk on two occasions in his entire life. He distinctly remembered both of these occasions. Other teens however, reported drinking occasionally and irregularly over several years. These teens were not able to recall all of the specific occasions of drinking over their lifetimes, so they could only guess or estimate the number of times they had consumed alcohol in their entire lives.

Further, teens also had difficulty counting drinks. Because teens were almost always given alcohol by others, many of the teens reported drinking out of other people's drinks. When a teen consumed alcohol by gulping from the drink of a friend or family member over the course of an evening, it was very hard for that teen to estimate the total number of drinks consumed. Also, because teen drinking tended to be clandestine and communal, many of the teens reported that they often drank straight from a bottle (or can) that was passed among friends. Even when teens drank out of cups, the size of their drinks was rarely standard. For example, one teen reported drinking a full Red Solo cup full of straight liquor and counting it as one drink.

Similar to adults, unless the teens were drinking 12-ounce cans of beer, it was very difficult for them to accurately count drinks.

Teen marijuana use showed different patterns of consumption from alcohol. The majority of the teens had tried marijuana once or used it very occasionally while a few teens reported never having used marijuana or using it every day. Despite the fact that marijuana is illegal for teens in all forms, acquisition was not an impediment to regular use. Almost all of the teens felt that marijuana was safer than alcohol, and few, if any, saw more than a mild risk to using it occasionally. Because the teens perceived marijuana as easy to get and relatively low risk, those that enjoyed using it, used it as much as they desired, even every day. Some teens acknowledged that some people who use every day can become “slow” or “unmotivated” but few saw that as a risk to themselves.

Methods

Cognitive Interviewing: Cognitive interviewing is a qualitative method designed to evaluate items on survey questionnaires. In particular, cognitive interviewing studies investigate how respondents understand and respond to questionnaire items and if their understandings are in line with the question intent. Through semi-structured interviews, cognitive interviewing provides an in-depth understanding of how respondents formulate their responses to questions based on their particular social and cultural contexts. Findings of a cognitive interviewing project often lead to recommendations for question improvement, provide evidence of question validity and can be used in post-survey quantitative analysis to assist in data interpretation.

Cognitive interviewing studies typically involve in-depth, semi-structured interviews with a small sample of approximately twenty to forty respondents. In these interviews, respondents are first administered the survey items under evaluation and then answer a series of probe questions that reveal how they arrived at their particular response choices. These probes can be either concurrent (asked with each survey item) or retrospective (asked after all survey items).

Sample selection for a cognitive interviewing project is purposive with respondents selected for specific characteristics -- such as race, health status or occupation-- that are relevant to the intended purpose of the survey instrument. When studying questions designed to investigate teen alcohol and marijuana usage, for example, the sample would consist of teens who use alcohol and marijuana as well as some who don't in order to examine potential sources of false positive reporting. Because of the small sample size, not all social and demographic groups are represented although an effort is made to maintain a varied sample.

Sample Alcohol and Marijuana Use: As seen in Table 2, all but one respondent had used either alcohol (ever) or marijuana (in the past 30 days). Most respondents had used both. A single respondent reported never having consumed alcohol but having used marijuana.

Table 2. Respondents' Alcohol and Marijuana Use			
		Alcohol Use Ever	
		yes	no
Marijuana Use in	yes	12	1
Past 30 days	no	6	1

Six respondents said they had used alcohol only one or two days ever while three said they had used it more than 40 days. Four respondents indicated that they had used marijuana only once or twice in the previous 30 days while five respondents said they had used marijuana every day (30 of the previous 30 days). Unsurprisingly, older respondents (17 and 18 year olds) had used both alcohol and marijuana.

Analysis of cognitive interview data involves an iterative process of synthesis and reduction—beginning with a large amount of textual data and ending with conclusions that are meaningful and serve the ultimate purpose of the study. The steps consist of: 1) Conducting interviews; 2) Synthesizing interview text into summaries; 3) Comparing summaries across respondents; 4) Comparing identified themes across subgroups; and 5) Making conclusions (Miller, Willson, Chepp, & Padilla, 2014). Through this reduction of the cognitive interview data, a comprehensive understanding of a question’s performance emerges and a more complex and complete understanding of understanding of the question response process is revealed. In the beginning it is only possible to understand how each individual respondent makes sense of and answers the survey question. By the end, individual interpretations are understood as well as how those interpretations relate across groups and within the overall context of the question’s performance.

Sample: A team of researchers from the CCQDER interviewed a total of 20 respondents. The research team recruited a purposive sample of high school students aged 15-18 through newspaper advertisements, email list contacts, flyers and word of mouth. Inclusion criteria included having ever consumed alcohol or marijuana. A screening process was employed over the telephone to determine eligibility for participation. The sample was almost evenly split between males and females while 60% of the sample was black/African American. Demographics for the full sample are shown in Table 1.

<i>Table 1. Demographic profile of respondents</i>		
	Number (n=20)	Percent
Race/Ethnicity		
Black/African American	12	60
White	7	35
multiple	1	5
Ethnicity		
Hispanic	1	5
Non/Hispanic	19	95
Gender		
Male	11	55
Female	9	45
Age		
15	5	25
16	2	10
17	9	45
18	4	20

Interviewing Procedures

All questions were administered to the respondents who chose their responses from the answer categories provided. During the interviews, retrospective and concurrent, intensive verbal probing was used to collect response process data. Audio recordings and written notes of interview summaries were collected and used as the basis of data analysis. All interviews were conducted face-to-face in the Questionnaire Design Research Laboratory within the CCQDER. Interviews typically lasted 60 minutes and respondents were given \$40 once the interview was complete.

Data Analysis: Analysis of interviews followed the guidelines for cognitive interviewing methodology, which is guided by the grounded theory approach. This approach does not aim to test existing hypotheses, but instead generates explanations of response error and various interpretive patterns that are closely tied to the empirical data. This includes the constant comparative method of analysis, in which analysts continually compare data findings to original data (Cresswell, 1998; Lincoln, 1985; Strauss & Corbin). This is an iterative process of data synthesis and reduction (Strauss & Corbin). After each interview was conducted, summary notes were written for each question. Summary notes included information on the way in which a respondent interpreted and processed individual questions, what experiences or

perceptions a respondent included in formulating a response and any response difficulties experienced by the respondent. After all interviews and summaries were completed, interviews were compared to identify common patterns of interpretation and response difficulties for each question. Sub-group analysis looked at patterns of interpretation and responses as they varied across different groups within the sample.

A data entry and analysis software application (Q-Notes) was used to conduct analysis. Q-Notes, developed by CCQDER, ensures systematic and transparent analysis across all cognitive interviews as well as provides an audit trail depicting the way in which findings are generated from the raw interview data.

III. Question-by-question Review

<p>Introduction: The next 4 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.</p>		
ALC1	<p><i>During your life, on how many days have you had at least one drink of alcohol?</i></p>	<p>A. 0 days B. 1 or 2 days C. 3 to 9 days D. 10 to 19 days E. 20 to 39 days F. 40 to 99 days G. 100 or more days</p>

This question was asked of all teens. All respondents were able to answer the question although several asked to have the question repeated.

Almost all respondents understood the question as asking about how many total days they had consumed alcoholic beverages. However, one respondent answered based on her consumption of liquor only. On further probing, this respondent revealed that for the last year she had consumed an average of two beers a day. She did not include drinking beer in her response of “10-19 days.”

Entire life: Several teens noted that it was difficult to estimate the number of days across their entire lives. One said, “It’s hard to count days during your entire life.” Another respondent took the timeframe “entire life” quite literally and answered “1 or 2 days” based on a time when he was a toddler and had accidentally consumed a colorful mixed drink. He had heard this story from his mother and had no first hand memory of the incident. Response error was seen in a single respondent who answered “1-2 days” based on her consumption over the past week rather

than over her entire life. When asked to clarify her answer she said, “Oh! They want to know in my LIFE!”

Sips for religious purposes: Most respondents did not include sips when answering. Several explicitly excluded sips from their responses. For example, one teen answered “0 days” because he has never bought alcohol for himself and only sips from his friends’ drinks. However, at least twice, he has gotten drunk off of these sips. Another respondent also excluded sips. She answered “3-5 days” based on having drunk alcohol on 3 days. She did not include any of the times she only had sips of her friends’ drinks rather than whole drinks of her own when answering this question. However, when answering subsequent question on alcohol consumption she DID include these sips.

A single respondent answered “1-2 days” based on having had wine for religious purposes. In these instances he had consumed ½ a glass of wine during Jewish religious ceremonies. He considered this to be more than a “sip” and counted those in his response.

One respondent heard the instruction to not include sips for religious purposes but wasn’t sure if he should include sips of drinks that his family members had given him. He noted that these sips were not for religious purposes. Ultimately, he decided not to count those sips and gave a response of “0 days.”

Definition of drink: With the exception of the respondent who answered based on drinking liquor only, respondents understood the question to refer to all types of alcohol. Respondents reported drinking cans or bottles of beer and malt liquor as well as straight liquor and mixed drinks. While most respondents did not include sips of alcohol, a few included swigs from bottles of liquor. Often respondents were not sure exactly how much they were drinking because they were drinking straight out of a bottle that was shared with friends or they were drinking drinks that were poured by someone else. One respondent described drinking large cups of homemade wine.

Uncertainty: Quite a few respondents noted that they were not at all sure of their responses. Respondents who drank on more than 4 days generally did not try to remember specific occasions of drinking in order to come up with a response. Rather, these respondents provided responses that represented their drinking generally. One respondent said, “I just really don’t know.” This respondent answered “3-9 days” because he was sure that it was more than two days and somewhat sure that it was less than ten days. Another respondent answered “20-39 days” saying “I don’t keep note of that anywhere. It’s just an estimate. I know I don’t drink a lot.” This respondent treated the response categories more like a scale. She didn’t choose the top two categories because she interpreted those as “a lot.” She said, “I don’t drink a lot. I don’t do it every day and didn’t start at a young age.” The bottom categories did not seem like enough though, so she chose 20-39 to represent her occasional drinking over the previous two years.

Respondents who had consumed alcohol only a few times, remembered specific incidents and could count them precisely. One respondent answered “1-2 days” and recalled drinking five shots of vodka on his 17th birthday and five more shots the next night. These were the only two times he’d ever consumed alcohol. Another respondent answered “3-9 days” and remembered four specific occasions, including his brother’s birthday and a friend’s graduation, when he had consumed beer.

ALC2	<i>How old were you when you had your first drink of alcohol other than a few sips?</i>	<p>A. I have never had a drink of alcohol other than a few sips</p> <p>B. 8 years old or younger</p> <p>C. 9 or 10 years old</p> <p>D. 11 or 12 years old</p> <p>E. 13 or 14 years old</p> <p>F. 15 or 16 years old</p> <p>G. 17 years old or older</p>
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This question was asked of all teens and all were easily able to provide a response. Respondents understood the question to be asking what age they were when they first drank an alcoholic beverage. Almost all respondents had specific memories of the first time they tried alcohol. Often these incidents were special occasions that had occurred within recent memory. For example, one respondent vividly remembered her first time drinking. She described going to a friend’s birthday party where the friend’s brother gave her a solo cup full of straight liquor. She recalled, “I was treed up. I was hyped.” Similarly, the respondent in the previous question, who had 5 shots of vodka on his 17th birthday, could easily report his age because of the special occasion.

Often respondents clearly remembered the occasion and knew for sure which grade they had been in at the time but had to think about their exact age at the time. This occasionally resulted in response error when respondents chose one answer category but later realized they should have chosen a different category. For example, one respondent initially answered “17 years old or older” but later remembered that the incident had occurred at the end of summer when he hadn’t had his birthday yet, so he would have still been 16 years old.

ALC3	<i>During the past 30 days, on how many days did you have at least one drink of alcohol?</i>	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days
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This question was asked of all teens. All but one teen were easily able to provide responses. One teen answered “don’t know.” This teen, who remembered drinking at least once in the previous 30 days, wasn’t sure if there were other times when she had consumed alcohol. This teen was high during the interview and had difficulty fully concentrating on the questions.

Almost all teens understood this as asking about the number of days they had consumed alcohol in the previous 30 days. Respondents who had not had not drunk at all during the previous 30 days were easily able to select “0 days.” Respondents who had consumed alcohol once or twice were able to count the specific occasions when they had drunk. One respondent answered “1 or 2 days and recalled having drunk a beer on New Year’s Eve (the previous week). A few respondents answered based on their regular behavior rather than on counting specific occasions. For example, one respondent answered “6-9 days” and said, “We usually drink once or twice per weekend, so in a typical month that’s going to be 6-8 times.”

Response error was seen with one respondent who answered “3-5 days” based only on the days she drank liquor. When asked how many days in the last month she had consumed beer, she said, “all 39” because she drinks beer every day.

ALC4	<i>During the past 30 days, how did you usually get the alcohol you drank?</i>	A. I did not drink alcohol during the past 30 days B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station C. I bought it at a restaurant, bar, or club D. I bought it at a public event such as a concert or sporting event E. I gave someone else money to buy it for me F. Someone gave it to me G. I took it from a store or family member H. I got it some other way
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This question was asked of all teens and all were easily able to provide a response. All respondents understood this question as asking about how they had acquired any alcohol they had consumed in the previous 30 days. Respondents who had not consumed alcohol in that timeframe chose “I did not drink alcohol during the past 30 days.” Other respondents chose the best response from the remaining options. For example, one teen chose “I bought it in a store...” This teen explained that he often “makes runs” to the liquor store with a friend who has a fake ID. He has gone to this store so often that the store employees now sell him liquor without checking his ID.

Teens usually chose the category “I gave someone money to buy it for me” when they had explicitly asked someone to go to the store to buy them alcohol and did not intend to share the alcohol with the person doing the purchasing. For example, one respondent answered “I gave someone money to buy it for me” because she has to give her brother money if she wants him to buy liquor for her and her friends.

Teens usually chose “someone gave it to me” when a friend gave them alcohol that they did not ask for in advance. For example, one teen answered “Someone gave it to me” because she was at the house of a friend, and the friend gave her a beer. This teen did not know where the beer came

from. Another chose this category because her 35 year old roommate often shares his liquor with her.

In situations where the alcohol was shared between friends, some teens had difficulty choosing between the categories “I gave someone money to buy it for me” and “Someone gave it to me.” Teens often chose “someone gave it to me” when friends shared alcohol as a group even if they ended up contributing some money in the end. Other times, no money was exchanged, but it was still not clear which category to choose because, as one teen noted, “There is always an exchange.” Sometimes he gives his friends money, but sometimes he drives his friends around or helps with homework.

The next 2 questions ask about how many drinks of alcohol you have had in a row, that is, within a couple of hours. For the first question, the number of drinks you need to think about is different for female students and male students.		
ALC5	<i>During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row (if you are female) or 5 or more drinks of alcohol in a row (if you are male)?</i>	<ul style="list-style-type: none"> A. 0 days B. 1 day C. 2 days D. 3 to 5 days E. 6 to 9 days F. 10 to 19 days G. 20 or more days

This question was asked to all teens. A few teens asked for the question to be repeated or for clarification. Female respondents answered based on having had 4 or more drinks within a few hours while male respondents answered based on having had 5 or more drinks within a few hours.

Definition of “drink”: Respondents were not consistent in their interpretations of “a drink.” One respondent answered “0 days” saying, “I’ve only ever had, like, one cup.” She explained, however, that her “one cup” consists of a solo cup full of straight liquor. Other respondents interpreted “drink” in a more standard fashion, considering a bottle of beer or a glass of wine to equal one drink. A few respondents tried to translate the quantities they typically drink into standard units. For example, one respondent answered that he drank 5 or more drinks “3-5 days.” He usually drinks “a forty” which he counted as 4 beers plus shots of liquor. Another respondent drinks directly out of a liquor bottle. She said she “doesn’t count” the number of drinks, but answered “2 days” figuring that consuming a fifth of Hennessy probably qualified as having had 4 or more drinks.

In a row: respondents interpreted “in a row” to be having drinks within a short period of time, however, the amount of time that constituted a short period varied. One respondent described having a cup of homemade wine, going to a party which lasted for 3 hours and then upon

returning home having 3 more cups of homemade wine. This respondent did not consider the first cup of wine to be “in a row” with the subsequent cups because several hours had passed between them. On the other hand, a few respondents wondered if “in a row” meant taking shots one after the other. Although the latter interpretation did not lead to any response error in this sample, it could possibly lead to response error if respondents answer based only on doing shots one after another, discounting other drinks.

ALC6	<i>During the past 30 days, what is the largest number of alcoholic drinks you had in a row?</i>	A. I did not drink alcohol during the past 30 days B. 1 or 2 drinks C. 3 drinks D. 4 drinks E. 5 drinks F. 6 or 7 drinks G. 8 or 9 drinks H. 10 or more drinks
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This question was asked to all teens. All teens were able to provide a response, and all understood the question as asking about the largest number of alcoholic drinks they had consumed in the previous 30 days. However, many of the teens indicated that they were not at all certain of their responses. Some of these respondents had trouble coming up with a number because they lose count or don’t remember how many they drank. One respondent answered “5 drinks” but then said, “I don’t know. I just picked one.” Other respondents weren’t sure of the number because they don’t count drinks. For example, one respondent answered “3 drinks” but then explained that because she drinks straight out of the bottle of liquor, “You can’t really count.”

Definition of drink: While some teens counted drinks in standard units such as cans of beer or “shots,” others did not. A few teens drank liquor straight from a bottle. One of these said, “Young people don’t use cups anymore. They drink out of the bottle.” That said, several teens did, in fact, use cups. However, they counted Solo cups full of wine or liquor as single drinks, so that the teen who drinks a Solo cup full of Hennessy every time she drinks answered “1 or 2 drinks.”

In a row: While most respondents understood the phrase “in a row” to mean within a few hours, a few respondents had trouble with the phrase. In answering this question, some respondents had forgotten the definition of “in a row” that was given in the preamble to this set of questions. One respondent answered “3 drinks” based on drinking three drinks over the course of one day but not within a few hours. Another respondent wondered if “in a row” could mean one drink a day for several days in a row. However, this respondent answered “3 drinks” based drinking three

drinks in one evening. Yet another respondent thought “in a row” might mean doing shots “back to back,” but this respondent answered “I did not drink alcohol during the past 30 days” so did not have to come up with an actual number.

<p>The next 3 questions ask about the type of alcohol you usually drink, the location where you drink, and the mixing of alcohol with energy drinks.</p>		
ALC7a	<i>During the past 30 days, what type of alcohol did you usually drink? (Select only one response.)</i>	<p>A. I did not drink alcohol during the past 30 days B. I do not have a usual type C. Beer D. Flavored malt beverages, such as Smirnoff Ice, Bacardi Silver, or Hard Lemonade E. Wine coolers, such as Bartles & Jaymes or Seagrams F. Wine G. Liquor, such as vodka, rum, scotch, bourbon, or whiskey H. Some other type</p>
ALC7b	<i>During the past 30 days, what type of alcohol did you drink most often? (Select only one response.)</i>	

For this question, half of the respondents were asked version A, and half were asked version B. All respondents were able to provide a response. Most respondents who received version A and all respondents who received version B understood the question as asking about the type of alcohol they drank most frequently during the previous 30 days. For example, one respondent who was asked version A answered “liquor” because, although she had tried other types of alcohol, she mostly drank liquor during the previous 30 days. Another respondent was asked version B and answered “beer” for similar reasons. The respondent had sampled various types of alcohol during the 30-day timeframe, but had drunk beer most often. This respondent said, “I tend to stay in my lane. Beer is my comfort zone.”

One respondent initially answered “0 days” to the question on drinking during the previous 30 days (ALC 3) because she didn’t include sips, This respondent DID include sips when answering this question and answered “liquor” rather than “I did not drink alcohol during the past 30 days.”

In some cases, Version A was interpreted as an opinion question rather than as a behavior question. Version A asked what respondents “usually drink” which lead some respondents to interpret this question as asking about their usual or preferred type of alcohol. One respondent who received version A answered, “I don’t have a usual type of alcohol” saying, “I don’t decide, Oh! I’m gonna have beer. I just drink what’s there.” In fact, during the previous 30 days, this

respondent had drunk only beer, but he did not choose “beer” because this was not necessarily his preference.

Response error was seen with one respondent who answered “liquor” to version A of the question. This respondent reported drinking liquor 3 days in the previous 30 days and beer every day. In this, as in all of the alcohol questions, she did not include beer when formulating her responses.

ALC8	<i>During the past 30 days, where did you usually drink alcohol? (Select only one response.)</i>	<ul style="list-style-type: none"> A. I did not drink alcohol during the past 30 days B. At my home C. At another person's home D. While riding in or driving a car or other vehicle E. At a restaurant, bar, or club F. At a public place such as a park, beach, or parking lot G. At a public event such as a concert or sporting event H. On school property
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This question was asked to all teens. All teens were able to provide a response, and all understood the question as asking about their usual location when they consumed alcohol in the previous 30 days. The respondents were able to easily choose among the categories. For example, one teen answered “at my home” because she and her friends always go to her house to drink. Her friends aren’t allowed to drink at their houses whereas she is. She said, “My people don’t care.” Another respondent answered “At another person’s house” because although she was served a mixed drink at a club during the previous 30 days, she mostly drank at parties or “kickbacks” (small gatherings of friends). A few respondents chose “at a public place such as a park, beach or parking lot” because they drank with friends at parks near their homes.

None of the other response categories were chosen by respondents in this sample. However, on probing, respondents indicated that they were familiar with these locations. In particular, respondents indicated an aversion to drinking and driving. One respondent said about drinking in cars, “Kids do that, but, nah. I don’t want to drive like that.”

One respondent who initially answered “0 days” to the question on drinking during the previous 30 days (ALC 3) because didn’t include sips of drinks, DID include sips when answering this question. She answered “at a restaurant, bar or club” rather than “I did not drink alcohol during the past 30 days.”

ALC9	<i>During the past 30 days, on how many days did you mix and drink alcohol with an energy drink, such as Monster or Red Bull?</i>	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days
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This question was asked to all teens. All teens were able to provide a response, and all understood the question as asking about how many times they had an energy drink and alcohol together during the previous 30 days. Almost all respondents answered “0 days.” Some had not consumed any alcohol at all during the previous 30 days, while most of those who had consumed alcohol had not mixed alcohol and energy drinks during the previous 30 days. Most respondents indicated that they were not familiar with the practice of mixing energy drinks and alcohol. One respondent said, “That’s not a thing.” A few respondents were familiar with the practice or were familiar with “4 Loco” but had not tried it themselves.

A single respondent answered “3-5 days” because she drank Red Bull and then liquor 3 times in the previous 30 days. This respondent generally drinks liquor straight out of the bottle, so she did not “mix” the alcohol and Red Bull in a cup but did drink them at the same time.

<i>The next questions are about marijuana or cannabis. Marijuana or cannabis is also called pot, grass, ganja and weed.</i>		
MJA1	<i>During the past 30 days, on how many days did you use marijuana or cannabis?</i>	____ (0-30 days)

This question was asked to all teens, but it wasn’t always clear to them what it was asking. For example, upon hearing the question, several teens paused and asked what cannabis was. One said, “Cannabis? What’s that? Is that like weed?” Other teens did not pause but later indicated that they weren’t sure what cannabis was. A few teens said they thought “cannabis” was another word for marijuana. Ultimately, the teens who weren’t sure ignored the word cannabis. All respondents answered based on the frequency of their use of marijuana over the previous 30 days.

Respondents who reported using marijuana “0” days were all certain of their answers. Some of these had never tried marijuana; others had tried it in the past, but were sure it had not been in the previous 30 days.

Teens who reported using marijuana 30 out of the previous 30 days were not always certain of their responses. Some confirmed that they do use marijuana every day without fail. One said,

“Yep. Every single day. I don’t miss.” However, others who said “30” were less sure. One respondent said that even when he runs out of marijuana to smoke, his friends usually have some for him, so he “most likely” smoked it every day. Another respondent initially answered “30” because he “pretty much” smokes every day. He later clarified that he actually does not smoke on Tuesdays and Thursdays when he has basketball practice, so the actual number of days he had used marijuana was 22 out of the previous 30. Like this respondent, several respondents answered “30” based on their identities as “every day users” of marijuana and not based on the actual number of days they had used in the previous 30.

Respondents who answered more than zero but less than 30 were not always certain of the exact number of days they had used marijuana. Some remembered specific times they had used marijuana. For example, on respondent answered “2,” and described each time. Other respondents could not remember specific incidents, so they provided a guess. One respondent estimated that he usually smokes marijuana “half or less than half” the days out of a month, so he answered “12.” Another respondent answered “20,” but said, “It was hard to answer. That’s just an estimate.”

Vocabulary: Respondent were generally familiar with all of the synonyms for marijuana listed in the introduction to this set of questions. However, some indicated that some of these words, “ganja” and “grass” in particular, seemed outdated or “like what my parents would call it.” Teens most frequently reported using the words “weed” or “gas” to refer to marijuana. The word “reggie” was also used to refer to inferior quality marijuana. Teens used the words “to cop,” meaning “to get or buy weed,” and “plug,” meaning the person who “hooks you up” with the person selling the marijuana. One respondent described her purchase of a “QP” which referred to a quarter pound of marijuana.

MJA2	<i>During the past 30 days, how did you use marijuana or cannabis? Please select all that apply. Did you...</i>	<ol style="list-style-type: none"> 1. Smoke it, for example, in a joint, bong, pipe, or blunt. 2. Eat it, for example, in brownies, cakes, cookies, or candy. 3. Drink it, for example, in tea, cola, or alcohol. 4. Vaporize it, for example, in an e-cigarette-like vaporizer or another vaporizing device. 5. Dab it, for example, using waxes or concentrates. 6. Use it some other way. 77. Do not know/Not sure 99. Refused
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This question was answered to all teens, and all were able to answer without hesitation. All answered based on how they had used marijuana and were able to choose from among the response categories provided. Teens described using marijuana by smoking it in joints, bongs bowls and pipes, and by vaping it, dabbing it and eating it. None of the teens were familiar with drinking marijuana and a few wondered what was meant by “use it some other way.”

Timeframe: Most respondents attended to the 30 day timeframe and chose response categories corresponding only to the ways they had used marijuana over the past 30 days even if they had used marijuana in other ways previously. For example, one respondent answered “smoke it” because he had only smoked joints over the previous 30 day period. This respondent had tried marijuana brownies several months prior but did not choose “eat it” because that was more than 30 days ago. Response error was seen in a few respondents who did not attend to the timeframe. These respondents answered based all the ways they had ever used marijuana. For example, one respondent chose “smoke it” and “eat it” because he usually smokes joints (which he had done in the previous 30 days) but had also tried a marijuana brownie once “a long time ago.”

Vocabulary: Teens referred to rolled marijuana cigarettes as “joints,” “jays” and “blunts.” While some teens distinguished joints which are rolled in “sheets” (rolling papers) and blunts which are rolled in tobacco, there was some overlap. That is, both joints and blunts were described at various times as being made with “roll-up sheets.”

MJA3	<i>How much do you risk harming yourself physically and in other ways if you use marijuana or cannabis daily or almost daily?</i>	1 No risk 2 Slight risk 3 Moderate risk 4 Great risk DK/REF
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This question was asked of all teens. It was not always clear that this was an opinion question, and a few teens who did not use marijuana every day weren’t sure if they were supposed to answer hypothetically or not. One said, “Is that like if I *do* or *don’t* use it daily? But I don’t... so...” Another said, “Is this like a hypothetical? I’m confused because I don’t use marijuana daily or almost daily.” Ultimately, all respondents were able to provide a response.

Respondents mentioned a variety of potential risks. Most respondents thought about the potential risks that might occur while being high. For example, several respondents mentioned an increased risk of bumping into things or falling while high. Several others mentioned that being high could lead to poor decision making. A few respondents thought about cognitive and emotional effects of frequent marijuana use such as “being a loser who drops out of school” or

having trouble managing emotions. A couple of respondents mentioned the danger of addiction and withdrawal.

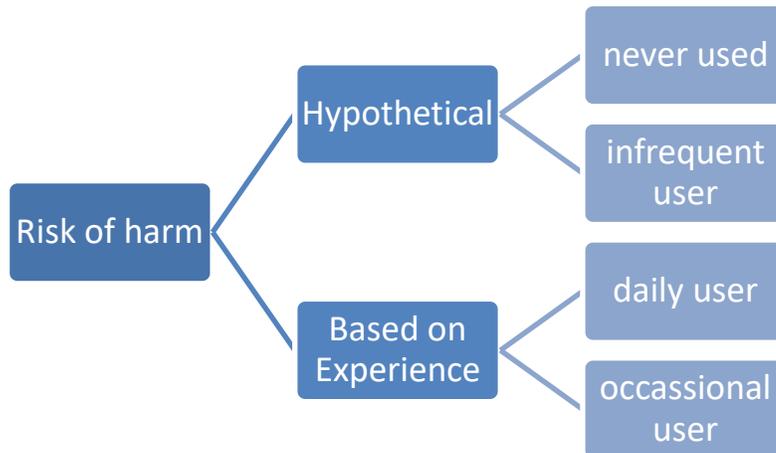


Figure 1 Basis of assessment for MJA3

As seen in figure 1, respondents formulated their answers differently based on how often they used marijuana. Respondents who had never used marijuana or who had only used marijuana infrequently thought about the question hypothetically. Even the respondents in this group who had used marijuana were not thinking of their actual experiences but about potential risks of using marijuana. One respondent who reported smoking marijuana one time in the previous 30 days answered “moderate risk” and said, “If I did smoke marijuana daily, which I don’t...” Another infrequent user answered “no risk” thinking about medical marijuana. He said, “If I had to use marijuana daily, it’d probably be for a reason that I needed it. Recommended by a doctor.” Another respondent, who had never used marijuana, answered “great risk” and described hypothetical dangers of addiction and withdrawal, “If you get hooked, it might be hard to stop due to the physical pain and withdrawal symptoms. It could mess up your brain and you’ll have hallucinations.”

Respondents who reported using marijuana daily or occasionally over the previous 30 days answered based on their own experiences. One respondent who reported smoking marijuana every day answered “slight risk” and said, “Once or twice I may have gotten too high and bumped into a wall, but I’ve never really hurt myself. Nothing too serious has happened.” Another respondent who said she had smoked marijuana 12 times in the previous 30 days answered “no risk” and said, “I do it and I’m still fine. It hasn’t done anything bad to me.” Like this respondent, other respondents who were occasional but not daily users of marijuana answered based on the risks they experienced as occasional users. They did not consider additional risks that they might experience if they used daily or almost daily. For example, one respondent answered “no risk” and said, “When I did do it [one time] even though I felt different, I still remember having a level head. I didn’t go off and do anything stupid.”

Comparison to other drugs: Quite a few respondents who answered “no risk” or “slight risk” compared marijuana to other drugs when explaining their assessment of risk. One respondent said, “It doesn’t pose a risk like you can get from cocaine or meth....drugs that will harm your brain or your cognitive function or even your appearance.” Others noted that alcohol can be more risky than marijuana in terms of decision making and driving. Two respondents talked about people they knew who had died from using PCP. One said, “It’s not like you’re going to die from a little weed.”

MJA4	<i>How much do other people risk harming themselves physically and in other ways if they use marijuana or cannabis daily or almost daily?</i>	1 No risk 2 Slight risk 3 Moderate risk 4 Great risk DK/REF
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This question was asked of all teens and all were able to provide a response. Most respondents answered based on their perceptions of the risk others might face if they use marijuana daily although a few respondents thought about the risks others might face if they use marijuana at all. Respondents thought of risks such as increased risk of injuries or health problems, emotional troubles, smelling bad, economic difficulties, loss of relationships and dropping out of school. All respondents answered hypothetically, but many drew on personal experiences with people they know who use marijuana frequently. One respondent who answered “slight risk” said, “When I see other people use [marijuana], nothing bad happens, but maybe their health could get worse over time.”

Half of the respondents provided the same answer to this question as they did to the previous question on risk (MJA3). These respondents thought the risks of using marijuana daily would be the same for others as for themselves. One respondent who answered “slight risk” for both MJA3 and MJA4 said, “I don’t think [their] risk would be any higher than mine.” Another respondent who answered “moderate risk” said, “I was thinking the same thing [as for MJA3]. It just depends on who you are whether you are the type to smoke that much, but the risks are the same.” This respondent was thinking of potential emotional risks to using marijuana daily such as increased anxiety.

Half of the respondents answered differently for this question than they did for MJA3. These respondents all thought others were at greater risk if they used marijuana daily. One respondent who answered “no risk” for himself and “moderate risk” for others said, “People can be dumb. I know I can stay in my lane. Other people can be reckless.” Another respondent who answered “no risk” for himself and “slight risk” for others said, “I wanted to say ‘no risk’ but people say it does stuff to your brain. Like killing brain cells or making you slow.” This respondent went on to

explain that he wasn't sure he believed that there was a real risk of brain damage because he had never observed any problems in himself or his friends, but he decided to answer "slight risk" since he had heard about the possibility.

MJA5	<i>Does an adult in your house use marijuana or cannabis?</i>	1. Yes 2. No
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This question was asked of all teens. One respondent initially asked, "What is cannabis?" However, when the question was read to her without using the term "cannabis," she was able to provide a response. All respondents understood this as a question about whether they live with any adults who currently use marijuana. For example, one respondent answered "no" and said, "Definitely never. My parents are against it. I think they tried it. My mom won't admit it, but my dad admitted it and said he didn't like it and told me not to try it." Another respondent answered "yes" and described how her step-father smokes marijuana every day. The respondent's mother does not like it when the step-father smokes, so he "tries to be sneaky."

Age of adulthood: A few respondents wondered how old someone had to be to count as an adult. One respondent said, "Is an adult 21 and older?" but then answered "yes" counting his 20 year-old cousin as an adult. Another respondent answered "no" but later mused that his 18 year-old sister is "technically an adult, I guess." If he had counted his sister as an adult, his response would have been "yes."

MJA6	<i>On the days that you did use marijuana or cannabis, how many times per day did you use it on average?</i>	___ Number of times [0-60]
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This question was asked of all teens although 2 respondents answered "zero" because they had never used marijuana. All respondents understood this as a question about how often they usually use marijuana on the days they use it. Respondents who had only tried marijuana once, answered based on that one time. For example, one respondent who had vaped marijuana one time with a friend answered "one" and said, "Well, it was once. Just the one time that day, so one." Respondents who use marijuana more frequently answered based on their usual habits. For example, one respondent answered "five" and described her typical day as, "Smoke, do some stuff, smoke, do some stuff, smoke, go to school, smoke, go home, smoke." Another respondent answered "one" because she smokes marijuana every night to help with her insomnia but never uses marijuana at any other time of day.

“times per day”: Respondents all understood “times per day” to mean a period of time they spent using marijuana regardless of how much they used during that time. For example, one respondent said that he usually takes two hits off of a joint and he counted that as one “time.” Several respondents described this as a “session.” For example, one respondent who answered “one” said, “I was thinking of sitting down with a group of friends smoking. I was thinking of just that one time. Not one hit, but one...session.” Other respondents agreed that smoking two joints during one “session” would only count as one “time.” However, several respondents kept track of “times” by the number of joints they smoke per day. One respondent answered “three” because he usually smokes three joints. He counted smoking each joint as one “time” regardless of whether he smoked it with friends or by himself.

MJA7	<i>On the days you use marijuana or cannabis, how many hours a day do you usually spend high?</i>	1=I usually don't get high 2=1-2 hours 3=3-4 hours 4=5-6 hours 5=7-8 hours 6=9 or more hours
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This question was asked of all teens except the 2 respondents who had never used marijuana. One respondent clarified, “This is still the last 30 days?” before answering. Another respondent was not able to answer the question at all saying, “I can’t really count. I’m going to pass on that one.” He went on to explain that the answer would depend on the type of marijuana he was using. He said, “It depends. If it’s reggie, low grade stuff, my answer would be ‘I usually don’t get high.’ If it’s good weed, it’d be 1-2 hours.” Although all other respondents were able to provide a response, some additional respondents also had difficulty answering because they weren’t sure about the duration of their highs. One respondent said she smokes marijuana before bed and is not sure how long she stays high in total. She ultimately answered “1-2 hours” since that is how long she stays high before she falls asleep. Other respondents reported that it was “hard to measure” or “hard to tell” the exact time they went from being high to not being high. These respondents answered based on their best estimate of how long they stay high.

Most respondents understood this question as asking how long they are high on days they use marijuana. For example, one respondent answered 5-6 hours. He reported that he stays high for 2 hours each time he smokes. To calculate his response, he added that time up across the three times a day he smokes marijuana and came up with 6 hours. Another respondent answered “9 or more hours” because she stays high “all day, every day.” A third respondent had only used marijuana one time. She answered “1-2 hours” because that’s how long she stayed high.

Several respondents answered based on how long they are high each time they use marijuana. For example, one respondent answered “3-4 hours” but described smoking 3 or more times a day and staying high for 2-3 hours each time. He said he usually smokes when he wakes up, smokes

before going to school in the evening, and sometimes smokes with his sister when he gets home from school. Similarly, another respondent answered “1-2 hours” because that’s how long he stays high each time he smokes a blunt. This respondent reported smoking 3-4 blunts a day and later confirmed that he is usually high between 3-8 hours a day.

High: Respondents described being high in various ways. A few described it as a being “calm” and “relaxed.” One said, “I feel good and I’m chill. I don’t wanna do nothing.” Other respondents described it as being “light headed” or “mentally cloudy.”

MJA8	<i>When you used marijuana or cannabis during the past 30 days, was it primarily:</i>	1 For medical reasons (like to treat or decrease symptoms of a health condition); 2 For non-medical reasons (like to have fun or fit in); 3 For both medical and non-medical reasons; 7 Don’t know/Not sure 9 Refused
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This question was asked of all teens except the 4 respondents who had had never used marijuana or who had not used it in the previous 30 days. All respondents understood the question as asking about their primary motivation for using marijuana. Almost all respondents answered “for non-medical reasons (like to have fun or fit in).” Almost all respondents said they do it “to have fun.” One respondent took exception to the parenthetical examples in this response category. She said, “I do it because I want to not to have fun or fit in. I just like the way it feels.” This respondent was particularly offended at the suggestion that she might be using marijuana to fit in. one respondent who chose this answer said that in addition to using marijuana for fun, he also uses it to ease the pain from a recent knee injury. He chose this category because his primary motivation for using marijuana is to have fun.

Two respondents chose “for both medical and non-medical reasons.” One respondent uses marijuana to help with her insomnia. However, she is not under the supervision of a doctor and does not use medical-grade marijuana. She chose “both” because in addition to using it for the insomnia, she also sometimes enjoys the feeling of being high. She said, “Sometimes I smoke and I tell myself, ‘Oh don’t fall asleep! This is fun!’” Another respondent chose this response category because she smokes both medical and non-medical marijuana. She buys both types from street dealers and does not use the marijuana for any particular medical condition. She asserted, “Ain’t nothing wrong with me!!”

MJA9	<i>During the past 7 days, on how many days did you breathe the smoke from someone who was smoking marijuana or cannabis products in an indoor or outdoor public place?[read if necessary: Examples of indoor public places are school buildings, stores, restaurants, concert halls, and sports arenas. Examples of outdoor public places are school grounds, sidewalks, parking lots, stadiums, fairgrounds, and parks.]</i>	_____ [0-7 days]
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This question was asked of all teens. The length of the question caused difficulties. First, several teens had difficulty providing a response to this question because they weren't sure what the question was asking. One said, "I don't get it. What?" Another said, "That's confusing. I don't know." A third said, "A lot of times. I don't know how you would count that."

Second, those who were able to provide a response understood the question in a variety of ways. Some respondents thought about breathing marijuana smoke. One respondent was not sure how to answer. He said, "I'm not sure because it's hard to know if I'm actually breathing it." He eventually answered "zero" since he had not seen or smelled marijuana smoke in the previous 7 days. Another respondent answered "7" and said, "Everywhere I go, there's someone smoking. I walk past them smoking and breathe the smoke all the time." Another respondent answered "zero" and explained that she often smells marijuana on the bus but thinks that this is just the smell of marijuana on their clothes because she never sees them actually smoking.

Several respondents answered based on the number of times they had smoked marijuana with other people. For example, one respondent answered "7" and said she knows she has "breathed the smoke" if she gets high. She said, "If I smoke the jay, then I know." Another respondent who answered "3" understood that the question was about "second hand smoke" but said that whenever she breathes second hand smoke it is always in "crowded basements" where she is smoking too.

Other respondents answered based on whether or not they had smelled, but not necessarily breathed smoke from, marijuana in a public place. One respondent who answered "5" said, "I smell it all the time. The back stairwell always smells like it. People have that smell on their clothes a lot too."

A few respondents thought the question was asking how many times they had intentionally breathed marijuana smoke as someone else inhaled it in order to get high. One respondent seemed offended by the question and said, "I smoke my own stuff. I don't do that."

Public place: Most respondents thought about places such as parks, schools, stores and street corners. A few thought about any place that was not their own home and also included friend’s houses and parties.

Timeframe: Most respondents answered based on the previous 7 days, but a few respondents answered based on the previous 30 days. One answered “3” but later caught her mistake and said, “Wait! 7 days? Oh! I thought you said ‘30’ so that would just be one day.”

Uncertainty: Only a few respondents answered based on recall of specific incidents. Most respondents described their answers as “a guess” or “an estimate.” One said, “I don’t know. Four or Five. I guess five.” Another said, “I wasn’t really thinking of exact times that happened. More like that it just happens a lot.”

MJA10	<i>During the past 7 days, on how many days did you breathe the smoke from someone who was smoking marijuana products in your home or where you live?</i>	_____ [0-7 days]
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This questions was asked to all teens. Unlike the previous question (MJA10), this question was easily answered by all respondents; however, it was double-barreled for some respondents who answered “zero” indicated that, generally, no one smokes marijuana in their homes. For example, one respondent who answered “zero” said, “Nobody in my household smokes anything so I wouldn’t have smelled anything.”

Other respondents answered based on the number of times someone else was smoking marijuana in their homes. For example, one respondent answered “1” thinking on the one day in the previous week that his sister was smoking marijuana when he got home from school. Almost all of these respondents were smoking the marijuana together with the person when they breathed in the smoke. For example, one respondent answered “1” because she had smoked marijuana with her roommate one time in the previous week.

Timeframe: A single respondent answered based on the previous 30 days. However, she answered “zero” and would have answered “zero” for the previous 7 days, so no response error was seen.

Works Cited

- Centers for Disease Control and Prevention (2013). Methodology of the Youth Risk Behavior Surveillance System-2013. *MMWR* 2013; 62(No. RR-1): 1-20.
- Cresswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage.
- Lincoln, Y. S. (1985). *Naturalistic Inquiry* (Vol.75). Sage.
- Massey, M. (2017). *Results of Cognitive Testing of Alcohol Questions for the NHIS (National Health Interview Survey) and the National Health and Nutrition Examination Survey (NHANES)*. National Center for Health Statistics. Hyattsville, MD.
- Miller, K., Willson, S., Chepp, V., & Padilla, J.-L. (2014). *Cognitive Interviewing Methodology: A Sociological Approach for Survey Question Evaluation*. Hoboken, NJ: Wiley.
- Strauss, A., & Corbin, J. (n.d.). *Basics of qualitative research (Vol. 15)*. Newbury Park, CA: Sage.

Appendix A

ALCOHOL		
<p>Introduction: The next 4 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.</p>		
ALC1	<i>During your life, on how many days have you had at least one drink of alcohol?</i>	<p>A. 0 days B. 1 or 2 days C. 3 to 9 days D. 10 to 19 days E. 20 to 39 days F. 40 to 99 days G. 100 or more days</p>
ALC2	<i>How old were you when you had your first drink of alcohol other than a few sips?</i>	<p>A. I have never had a drink of alcohol other than a few sips B. 8 years old or younger C. 9 or 10 years old D. 11 or 12 years old E. 13 or 14 years old F. 15 or 16 years old G. 17 years old or older</p>
ALC3	<i>During the past 30 days, on how many days did you have at least one drink of alcohol?</i>	<p>A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days</p>
ALC4	<i>During the past 30 days, how did you usually get the alcohol you drank?</i>	<p>A. I did not drink alcohol during the past 30 days B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station</p>

ALCOHOL		
		<p>C. I bought it at a restaurant, bar, or club</p> <p>D. I bought it at a public event such as a concert or sporting event</p> <p>E. I gave someone else money to buy it for me</p> <p>F. Someone gave it to me</p> <p>G. I took it from a store or family member</p> <p>H. I got it some other way</p>
<p>The next 2 questions ask about how many drinks of alcohol you have had in a row, that is, within a couple of hours. For the first question, the number of drinks you need to think about is different for female students and male students.</p>		
ALC5	<p><i>During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row (if you are female) or 5 or more drinks of alcohol in a row (if you are male)?</i></p>	<p>A. 0 days</p> <p>B. 1 day</p> <p>C. 2 days</p> <p>D. 3 to 5 days</p> <p>E. 6 to 9 days</p> <p>F. 10 to 19 days</p> <p>G. 20 or more days</p>
ALC6	<p><i>During the past 30 days, what is the largest number of alcoholic drinks you had in a row?</i></p>	<p>A. I did not drink alcohol during the past 30 days</p> <p>B. 1 or 2 drinks</p> <p>C. 3 drinks</p> <p>D. 4 drinks</p> <p>E. 5 drinks</p> <p>F. 6 or 7 drinks</p> <p>G. 8 or 9 drinks</p> <p>H. 10 or more drinks</p>
<p>The next 3 questions ask about the type of alcohol you usually drink, the location where you drink, and the mixing of alcohol with energy drinks.</p>		
ALC7a	<p><i>During the past 30 days, what type of alcohol did you usually drink? (Select only one response.)</i></p>	<p>A. I did not drink alcohol during the past 30 days</p> <p>B. I do not have a usual type</p> <p>C. Beer</p>

ALCOHOL		
		<p>D. Flavored malt beverages, such as Smirnoff Ice, Bacardi Silver, or Hard Lemonade</p> <p>E. Wine coolers, such as Bartles & Jaymes or Seagrams</p> <p>F. Wine</p> <p>G. Liquor, such as vodka, rum, scotch, bourbon, or whiskey</p> <p>H. Some other type</p>
ALC7b	<i>During the past 30 days, what type of alcohol did you drink most often? (Select only one response.)</i>	<p>A. I did not drink alcohol during the past 30 days</p> <p>B. I do not have a usual type</p> <p>C. Beer</p> <p>D. Flavored malt beverages, such as Smirnoff Ice, Bacardi Silver, or Hard Lemonade</p> <p>E. Wine coolers, such as Bartles & Jaymes or Seagrams</p> <p>F. Wine</p> <p>G. Liquor, such as vodka, rum, scotch, bourbon, or whiskey</p> <p>H. Some other type</p>
ALC8	<i>During the past 30 days, where did you usually drink alcohol? (Select only one response.)</i>	<p>A. I did not drink alcohol during the past 30 days</p> <p>B. At my home</p> <p>C. At another person's home</p> <p>D. While riding in or driving a car or other vehicle</p> <p>E. At a restaurant, bar, or club</p> <p>F. At a public place such as a park, beach, or parking lot</p> <p>G. At a public event such as a concert or sporting event</p> <p>H. On school property</p>
ALC9	<i>During the past 30 days, on how many days did you mix and drink alcohol with an energy drink, such as Monster or Red Bull?</i>	<p>H. 0 days</p> <p>I. 1 or 2 days</p> <p>J. 3 to 5 days</p>

ALCOHOL		
		K. 6 to 9 days L. 10 to 19 days M. 20 to 29 days N. All 30 days
MARIJUANA		
<i>The next questions are about marijuana or cannabis. Marijuana or cannabis is also called pot, grass, ganja and weed.</i>		
MJA1	<i>During the past 30 days, on how many days did you use marijuana or cannabis?</i>	____ (0-30 days)
MJA2	<i>During the past 30 days, how did you use marijuana or cannabis? Please select all that apply. Did you...</i>	1.Smoke it, for example, in a joint, bong, pipe, or blunt. 2.Eat it, for example, in brownies, cakes, cookies, or candy. 3.Drink it, for example, in tea, cola, or alcohol. 4.Vaporize it, for example, in an e-cigarette-like vaporizer or another vaporizing device. 5.Dab it, for example, using waxes or concentrates. 6.Use it some other way. 77.Do not know/Not sure 99.Refused
MJA3	<i>How much do you risk harming yourself physically and in other ways if you use marijuana or cannabis daily or almost daily?</i>	1 No risk 2 Slight risk 3 Moderate risk 4 Great risk DK/REF
MJA4	<i>How much do other people risk harming themselves physically and in other ways if they use marijuana or cannabis daily or almost daily?</i>	1 No risk 2 Slight risk 3 Moderate risk 4 Great risk DK/REF
MJA5	<i>Does an adult in your house use marijuana or cannabis?</i>	3. Yes 4. No
MJA6	<i>On the days that you did use marijuana or cannabis, how many times per day did you use it on average?</i>	___ ___ Number of times [0-60]

ALCOHOL		
MJA7	<i>On the days you use marijuana or cannabis, how many hours a day do you usually spend high?</i>	1=I usually don't get high 2=1-2 hours 3=3-4 hours 4=5-6 hours 5=7-8 hours 6=9 or more hours
MJA9	<i>During the past 7 days, on how many days did you breathe the smoke from someone who was smoking marijuana or cannabis products in an indoor or outdoor public place?[read if necessary: Examples of indoor public places are school buildings, stores, restaurants, concert halls, and sports arenas. Examples of outdoor public places are school grounds, sidewalks, parking lots, stadiums, fairgrounds, and parks.]</i>	_____ [0-7 days]
MJA10	<i>During the past 7 days, on how many days did you breathe the smoke from someone who was smoking marijuana products in your home or where you live?</i>	_____ [0-7 days]