
ABCD Human Subject Study Adolescent Brain Cognitive Development – ABCDSTUDY.org

Release Notes: Adolescent Brain Cognitive Development StudySM (ABCD) Data Release 4.0

COVID Rapid Response Research (RRR) Survey

First data release (Surveys #1, 2, and 3)

<http://dx.doi.org/12805210.15154/1520584>

December 2020

Change Log

December 2020

- Initial release of Surveys 1-3

Table of Contents

COVID Rapid Response Research (RRR) Survey	1
General Information	3
Youth Assessment	3
Note: Variable Description Error in Data Dictionary	3
Pet ownership	3
On-site or online school attendance and activities	4
School activities and parenting.....	4

School feelings and emotion	4
Sleep timing.....	5
Daily routines	5
Physical activity	5
Screen Time.....	5
Racism/discrimination in relation to coronavirus.....	6
COVID Attitudes and Practices	6
Coping behaviors.....	8
NIH Toolbox Emotion Measures.....	8
COVID-Related Worry.....	8
Perceived Stress	9
Additional Mental Health Items	9
Parental Knowledge / Monitoring	9
Schedule of Questions.....	9
Parent Assessment	12
Family Actions	12
Family Coping Activities.....	12
Schooling	12
Routines, Physical Activity, and Sleep.....	12
COVID Attitudes and Practices	13
Schedule of Questions.....	14
Linking data from the COVID Surveys to data from ABCD main study visits.....	16
Known Issues	18
Date of Assessment Issues in Surveys 1-3	18
Parent Substance Use Questions in Survey 2	21

General Information

The Adolescent Brain Cognitive Development StudySM (ABCD Study[®]), the largest longitudinal study of brain development and child health in the United States, follows over 10 years 11,878 children recruited from 21 U.S. research sites, recruited at ages 9-10 in 2016-18. In March 2020, when our participants were ages 11- to 13-years-old, the world became substantially affected by the COVID-19 pandemic, leading to an upheaval in the economy and the lives of almost every family. The ABCD Study developed brief surveys sent electronically to all ABCD participants and their participating parent/guardian about the impact of the pandemic on their lives. An overview of the ABCD Study is at <https://abcdstudy.org>.

We sent Survey 1 May 16-22, 2020, Survey 2 June 24-27, 2020, and Survey 3 August 4-5, 2020. Data from these first three surveys constitute this data release. Future releases will contain data from subsequent surveys.

This document describes the contents of the survey instrument available for download and other notes for users of these data.

Youth Assessment

Note: Variable Description Error in Data Dictionary

There is an error in the data dictionary description for three variables in the youth assessment. These are described below with the correct variable definition

Variable	Incorrect Description	Correct Description
<i>child_test_1_cv</i>	Results of child's COVID-19 Test 1	Date of child's COVID-19 Test 1
<i>child_test_2_cv</i>	Results of child's COVID-19 Test 2	Date of child's COVID-19 Test 2
<i>child_test_3_cv</i>	Results of child's COVID-19 Test 3	Date of child's COVID-19 Test 3

Pet ownership

Youth were asked if they have a pet (pets_cv), and if so, what kind:

pet_identify_cv (select all that apply of: Dog, Cat, Horse, Fish, Small animal (e.g., rabbit, hamster, bird), or Other)

On-site or online school attendance and activities

Youth were first asked to respond whether their schooling was like it was before COVID-19: whether they went to school, got school-at-home, or a mix of both. If youth responded that they had any school activities, they were asked to respond to four questions about the average time per day spent on different kinds of school material.

Some outlying responses were observed for a very small number (<0.1%) of participants for the following items:

- online_arts_cv
- online_science_cv
- online_other_cv
- school_like_activities_cv

Some children responded taking online classes for more than 24 hours a day, if one combines all mutually exclusive responses, which is not possible and may be due to confusion by respondent between “how many hours a day” and “how many hours a week”. Please note that we corrected these items in the next version of the questionnaire to avoid this problem for T4 and onward. There are some longitudinal discrepancies between T1 and T2 & T3 due to the summer period; for instance the correlation between T1 and T2 is moderate for the following items (online_arts_cv; online_science_cv; online_other_cv), due to substantial changes in school activities due to the summer period. Correlation between T2 and T3 is high, suggesting that the pattern was consistent within the summer period.

School activities and parenting

Youth were asked how many days per week they were helped or supervised by a parent (or other adult taking care of them) for school work. If they responded one day or more, they were asked to specify how many days per week they were assisted by an adult for various activities.

School feelings and emotion

Three questions were constructed to ask how they find their school work, whether they are worried about missing school, and whether they are enjoying school.

Sleep timing

Questions about typical sleep behavior in the past week are derived from the Munich Chronotype Questionnaire (Roenneberg et al. Life between clocks: daily temporal patterns of human chronotypes. *J Biol Rhythms*, 2003, 18: 80-90); however, the time period is for the past week only and no distinction is made for school days and school-free days (e.g., weekends). Time resolution is hours for bedtime and sleep time (night-time hour options only), wake up time and school start time (daytime hour options only). Variables available are:

- Time of going to bed (time resolution in hours; night-time hours only)
- Time of actually starting to fall asleep (time resolution in hours; night-time hour options only)
- Minutes needed to fall asleep
- Number of awakenings during the night (up to 10)
- Total time awake during the night
- Time of waking up (time resolution in hours; daytime hour options only)
- Time of starting school work (time resolution in hours; daytime hour options only)

Daily routines

Six questions ask about daily routines with options on a 5-point Likert scale, from 'never' to 'very frequently'. Some items are derived from The Questionnaire of Unpredictability in Childhood (QUIC, Glynn et al., Measuring Novel Antecedents of Mental Illness: The Questionnaire of Unpredictability in Childhood. *Neuropsychopharmacology*, 2019, 44: 876–882), and ask about typical morning and bedtime routines, participation in family activities, and worrying about family not having enough money to pay for necessities.

Physical activity

Questions about physical activity in the past week are modified from the International Physical Activity Questionnaire (IPAQ) short form (Lee et al., Validity of the international physical activity questionnaire short form (IPAQ-SF): A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*. 2011, 8:115. Questions ask about walking and moderate/vigorous activity, first establishing number of days that these activities were performed, following up with the amount of time spent doing the activity on a day. A question is included about daily sedentary (sitting) activity.

Screen Time

Screen Time was measured using self-report of the amount of time on a typical day youth used recreational screen media categories and total time spent (the following instructions were given

for this section: Please do NOT include time spent on school related work, but DO include watching TV, shows or videos, texting or chatting, playing games, or visiting social networking sites (Facebook, Twitter, Instagram). On an average day in the past week, how much time do you). Variables labels coincide with the ABCD 3.0 dataset for typical weekend day screen time use at the youths annual visits, since during this COVID time many youth are at home throughout the day either without school or engaging in virtual school. Due to the likelihood that many youth would likely be at home throughout most of these assessments, screen time was not captured for both a typical weekday and a typical weekend day independently, as is done in the ABCD annual data collections. There are school variables to account for whether the youth was attending school in person.

For the first 3 Surveys released the response answers were 15 minutes, 30 minutes, 45 mins, 1 hour, 1.5 hours, 2 hours, 2.5 hours, and then each whole hour through 24 hours. It should be noted that depending on the type of device the youth used to complete the survey, there may be errors, particularly at the higher end, due to the way the answer options appeared; for example, if a child chose 1 hour, they may have accidentally spun the wheel to the end and click to try to get out of the answer option, rather than to mean to select 24 hours. This can be seen in instances where a child reports 24 hours of “Play multiplayer video games ...” but only 5 hours of total screen time on a typical day. This will also be true in the future Survey 4 release.

Racism/discrimination in relation to coronavirus

Two questions were constructed to ask about witnessing or experiencing racism or discrimination in relation to coronavirus.

COVID Attitudes and Practices

These items assessed youth attitudes, practices, knowledge, and knowledge sources about COVID-19.

- demo_stayed_away_cv
 - demo_avoid_news
 - demo_wash_hands_cv
 - demo_mask_coverage_cv
 - demo_hand_sanitizer_cv
 - demo_wipes_cv
 - demo_touching_things_cv
 - demo_touching_people_cv
 - demo_exercise_cv
-

- demo_stayed_indoors_cv
- demo_schoolwork_on_comp_cv
- demo_afraid_cv
- demo_affect_life_cv
- coverage_cv
- tv_view_cv
- social_media_cv
- news_update_cv
- social_media_platform_cv

A small subset of missing values occurs not due to branching logic (~229-235 NAs). This is distributed across sites and may be due to youth exiting the survey prior to completion.

Measures beginning with the prefix “demo_” asked about daily routines, with responses on a Likert from 1 to 4. For example,

demo_mask_coverage_cv

I wear a mask over my face or protective gear (e.g. gloves, things to cover my clothes)

- 1, I have not done this in the last week
- 2, I did this some of the time last week
- 3, I did this most of the time last week
- 4, I did this all the time last week

Responses across these 13 measures were available for covid19_cv1_arm_2 and covid19_cv3_arm_2. The measures showed reasonable distributions across the Likert scale. Some measures of daily responses showed substantial change across these first two timepoints (e.g., demo_schoolwork_on_comp_cv), indicating potential sensitivity to changes in local pandemic rules or behaviors. Other measures of attitudes showed similar score distributions across the two time points (e.g., demo_afraid_cv), indicating potentially more stable traits resilient to changes in local pandemic rules or behaviors.

Five measures used a five-point Likert asking about media usage, at each of the three time points. For example,

How often did you view television media coverage (e.g., news stations) of coronavirus?

- 0, Not at all

- 1, Less than 1 hour per day
- 2, About an hour per day
- 3, 1 to 2 hours per day
- 4, More than 2 hours per day
- coverage_cv
- tv_view_cv
- social_media_cv
- news_update_cv
- social_media_platform_cv

These responses were reasonably distributed, except for news_update_cv, which was skewed toward “0, Once per day or less”, indicating youth were not reporting checking for news updates. Similarly, youth overwhelmingly endorsed “None” for the question:

social_media_platform_cv :

Which platform did you use the most when checking for news related to coronavirus?

1, Twitter | 2, Instagram | 3, TikTok | 4, Snapchat | 5, YouTube | 6, Reddit | 7, Facebook | 8, Other | 9, None

Coping behaviors

A new question was constructed asking about activities done in the past week such as learning a new hobby. Participants could check those activities that applied.

NIH Toolbox Emotion Measures

Youth-reported measures of sadness (8 items), fear (8 items), and positive affect (9 items) were measured using instruments from the NIH Emotion Battery (Gershon et al., 2013). Youth were asked on a scale from “Never” to “Almost Always” how often they had felt a particular emotional experience.

COVID-Related Worry

Five questions were constructed to measure worry and cognitions about the coronavirus. These included asking youth how worried they have been about the coronavirus; how worried others have been; how much life has changed as a result of coronavirus; how hopeful youth are that the coronavirus crisis will end soon; and how stressful the uncertainty of COVID-19 has been on their lives. Response options ranged from “Not at all” to “Extremely”.

Perceived Stress

Perceived stress was measured using the 4-item version of the Perceived Stress scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). Youth were asked to indicate how often they experienced stressful cognitions in the past month. Response options ranged from “Never” to “Very Often”.

Additional Mental Health Items

One additional item was added, “I felt angry or frustrated”, to measure anger emotion, with identical response options to the NIH Toolbox emotion measures. A second item was constructed to measure how much a youth’s perceived mental well-being has changed in the past week, ranging from “much worse” to “much better”.

Parental Knowledge / Monitoring

In Surveys 1, 2, and 3, youth completed four items measuring parental knowledge / monitoring:

- parent_monitor_q1_y_cv
- parent_monitor_q3_y_cv
- parent_monitor_q4_y_cv
- parent_monitor_q5_y_cv

These are four of the five items included on the ABCD study’s measure of parental monitoring at the main study visits. See Zucker et al. (2018, *Developmental Cognitive Neuroscience*, 32, 107-120) for a description of the measure.

Schedule of Questions

The following questions were asked only on either Survey 1 & 3 or only on Survey 2. A subset of participants erroneously may have received questions of the incorrect survey. Any data present for surveys at which the question was NOT administered is invalid. All other questions not listed below were asked at Survey 1, 2, and 3.

Question	Survey 1	Survey 2	Survey 3
felt_cv	x		x
felt_life_went_wrong_cv	x		x
felt_unhappy_cv	x		x
felt_lonely_cv	x		x

felt_sad_cv	x		x
felt_alone_cv	x		x
felt_always_sad	x		x
felt_no_fun_cv	x		x
felt_angry_cv	x		x
attentive_y_cv		x	
delighted_y_cv		x	
calm_y_cv		x	
ease_y_cv		x	
enthusiastic_y_cv		x	
interested_y_cv		x	
confident_y_cv		x	
energetic_y_cv		x	
concentrate_y_cv		x	
felt_scared_cv		x	
worried_about_me_cv		x	
worried_cv		x	
something_awful_cv		x	
worried_at_night_cv		x	
felt_nervous_cv		x	
worried_at_home_cv		x	

scared_easily_cv		x	
demo_online_cv		x	
demo_friends_cv		x	
demo_parents_cv		x	
demo_siblings_cv		x	
demo_tone_friends_cv		x	
demo_tone_parents_cv		x	
demo_tone_siblings_cv		x	
demo_stayed_away_cv	x		x
demo_avoid_news	x		x
demo_wash_hands_cv	x		x
demo_mask_coverage_cv	x		x
demo_hand_sanitizer_cv	x		x
demo_wipes_cv	x		x
demo_touching_things_cv	x		x
demo_touching_people_cv	x		x
demo_exercise_cv	x		x
demo_stayed_indoors_cv	x		x
demo_schoolwork_on_comp_cv	x		x
demo_afraid_cv	x		x

demo_affect_life_cv	x		x
---------------------	---	--	---

Parent Assessment

Family Actions

A question was constructed asking about activities the family engaged in or avoided in the past week by choice, rather than because of closures. In Surveys 1 and 2, participants had the option of checking up to 13 boxes with different COVID related activities. A checkbox corresponding to “None of the above” was option 14. On Survey 3, an additional checkbox was added (item 15 in the data) corresponding to the item “Wore Masks”. Data for item 15 should be disregarded for Surveys 1 and 2 as only a few participants who took the survey later on had the item 15 checkbox as an available option. NOTE: The label for item 15 is missing from the data dictionary. Each checkbox is a separate variable with the item number appended to the end of the name (e.g., fam_actions_cv___15 corresponds to the checkbox item 15).

Family Coping Activities

A question was constructed asking about activities the parent engaged in the past week to cope. Participants had the option of checking up to 8 checkboxes. Item number 9 corresponds to the checkbox “None of the above”. Each checkbox is a separate variable with the item number appended to the end of the name (e.g., p_cope_cv___2 corresponds to the checkbox item 2).

Schooling

Parents were asked about school closure and school attendance of their children. The parents who reported being the primary (or co-primary) person responsible for child's care during the day were asked questions about how much those activities interfered with their professional and household duties. Further questions addressed how much time they spent in helping the children in their school activities along with other questions regarding the continuity of schooling. Note that the surveys #2 and #3 covered at least partially schools' summer break for a large number of participants.

Routines, Physical Activity, and Sleep

Questions about moderate-vigorous physical activity in the past week are modified from the International Physical Activity Questionnaire (IPAQ) short form (Lee et al., Validity of the

international physical activity questionnaire short form (IPAQ-SF): A systematic review.

International Journal of Behavioral Nutrition and Physical Activity. 2011, 8:115.

Seven questions about sleep are from the Sleep Disturbance Scale (Bruni et al., The Sleep Disturbance Scale for Children (SDSC) construction and validation of an instrument to evaluate sleep disturbances in childhood and adolescence. *J Sleep Res*. 1996, 5:251-261), specifically from the Disorders of initiating and maintaining sleep subscale. The period has been modified to the past week. Two questions that quantify sleep duration and sleep onset latency are asked at each time point whereas the remaining 5 questions about difficulties initiating and maintaining sleep (responses range from Never to Always on a 5-point Likert scale) are asked on Survey 2. The 7 items (each scored between 1 and 5) can be added to obtain a total score for difficulty initiating and maintaining sleep, with higher scores reflecting greater difficulty.

Note that the Sleep Disturbance Scale is included in the main ABCD Study assessment protocol (*abcd_sds01*) allowing users to compare pre- and post-COVID patterns.

COVID Attitudes and Practices

Parents were asked about youth exposure to news about COVID-19 and whether the virus has elicited strong emotions, or gotten in the way of child's enjoyment of life.

For youth news exposure at the first time point, for 16 participants there was a potential branching logic glitch, resulting in 16 missing data points for:

- `child_news_time_cv`
- `child_news_source_cv`

Four-point Likert scale items given at these three time points asked whether the virus has elicited strong emotions or gotten in the way of the youth's enjoyment of life; NAs were T1: 334; T2: 181; T3: 133:

- `child_fear_cv`
- `child_enjoy_cv`

Parental Involvement (Talked About X) items asked about behaviors in the PAST WEEK at each timepoint. A five-point Likert (1, Never; 2, Rarely; 3, Occasionally; 4, Frequently; 5, Very Frequently). Missing data were minimal as a percentage of responses (335, 178, 131) and distributions were reasonable.

- `talk_wash_cv`
 - `talk_social_distance_cv`
 - `talk_cancel_cv`
-

- talk_isolate_cv
- talk_symptoms_cv
- talk_vuln_cv
- talk_race_cv
- talk_conserve_cv

Note that the **talk_mask_cv** question was added at Survey 3 and is not in the data dictionary; this will be corrected in the next release.

Remaining measures assessing parent involvement, using 5-point “Strongly Disagree-Strongly Agree” Likert were asked at two timepoints (Surveys 1 and 3) and showed reasonable distributions.

- assure_child_cv
- prepared_child_cv
- child_sched_cv
- child_worry_cv
- p_feeling_cv
- p_safety_cv
- encouraged_cv
- avoid_discussing_cv
- avoid_talking_about_cv
- child_frustrated_cv
- child_breaking_rules_cv
- child_serious_cv
- child_worried_about_cv

Schedule of Questions

The following questions were asked only on either Survey 1 & 3 or only on Survey 2. A subset of participants erroneously may have received questions on the incorrect survey. Any data present for surveys on which the question was NOT administered is invalid. All other questions not listed below were asked at Surveys 1, 2, and 3.

Question	Survey 1	Survey 2	Survey 3
----------	----------	----------	----------

fam_exp_racism_cv	x		x
increased_conflict_cv	x		x
worry_about_cv	x		x
get_coronavirus_cv	x		x
think_will_hospitalized_cv	x		x
think_will_get_cv	x		x
think_someone_close_get_cv	x		x
All parent substance use questions (e.g. "su_p_xx_xx_cv")		x	
summary_1_p_cv		x	
fam_rout_cv		x	
fam_hc_acc_cv		x	
fam_ht_acc_cv		x	
fam_supp_acc_cv		x	
fam_stress_cv		x	
fam_discord_cv		x	
ext_fam_diag_cv		x	
ext_fam_severity_cv		x	
child_reluc_cv		x	
child_sleep_difficult_cv		x	
child_sleep_anxiety_cv		x	

child_wake_up		x	
child_sleep_again		x	
assure_child_cv	x		x
prepared_child_cv	x		x
child_sched_cv	x		x
child_worry_cv	x		x
p_feeling_cv	x		x
p_safety_cv	x		x
encouraged_cv	x		x
avoid_discussing_cv	x		x
avoid_talking_about_cv	x		x
child_frustrated_cv	x		x
child_breaking_rules_cv	x		x
child_serious_cv	x		x
child_worried_about_cv	x		x

Linking data from the COVID Surveys to data from ABCD main study visits

Users may be interested in linking data from the COVID surveys to data from the main ABCD study visits. For example, they might be interested in comparing a measure before the pandemic (from the main ABCD study) and after the start of the pandemic (from the COVID

surveys). In this case, the user might want to know how much time elapsed between these two measurements that are being linked.

For users' reference, we have computed for each participant the amount of time that elapsed between (a) the last main ABCD study visit available in the NDA 3.0 data release and (b) the first completed COVID survey included in the current data release. Descriptive statistics for the length of this gap are reported in tables below.

The length of gap varies depending on which type of main study visit you are linking to COVID survey data. For example, the gap may be longer if you can only link to main study visits that are annual visits because the measure of interest was not collected at midyear interviews. Similarly, the gap may be longer if you are interested in linking COVID surveys to brain scans, which occurred only at a subset of main study visits.

We also report gaps separately for the youth vs. parent COVID surveys.

There were N = 7858 youth who completed 1+ of the COVID surveys:

Descriptive statistics for length of gap between most recent ABCD main study visit and first COVID survey in this release completed by youth. Gap is measured in months.

Which type of main study visit are you linking COVID surveys to?	N	Mean	SD	Min	10th %ile	25th %ile	Median	75th %ile	90th %ile	Max
Most recent visit, either annual or midyear	7858	8.6	2.8	4.0	5.4	6.6	8.4	10.3	12.2	36.1
Most recent annual visit	7858	12.4	4.2	4.1	7.0	9.4	12.1	15.2	17.5	40.6
Most recent midyear visit	7818	10.8	4.0	4.0	5.7	7.4	10.4	13.9	16.0	34.2

Most recent visit with a brain scan	7858	17.1	7.7	4.1	7.1	10.2	16.2	23.8	27.3	45.4
-------------------------------------	------	------	-----	-----	-----	------	------	------	------	------

A parent completed 1+ of the COVID surveys for N = 7751 participants:

Descriptive statistics for length of gap between most recent ABCD main study visit and first COVID survey in this release completed by parent. Gap is measured in months.

Which type of main study visit are you linking COVID surveys to?	N	Mean	SD	Min	10th %ile	25th %ile	Median	75th %ile	90th %ile	Max
Most recent visit, either annual or midyear	7751	8.5	2.9	4.0	5.2	6.4	8.2	10.2	12.0	34.6
Most recent annual visit	7751	12.2	4.2	4.1	6.8	9.2	12.0	15.0	17.4	41.6
Most recent midyear visit	7694	10.8	4.1	4.0	5.6	7.3	10.4	13.9	15.9	36.8
Most recent visit with a brain scan	7751	17.1	7.8	4.1	6.9	10.2	16.5	23.8	27.3	45.4

Known Issues

Date of Assessment Issues in Surveys 1-3

Surveys 1-3 did not have a link expiration date when distributed. Thus, parent or youth participants might have completed two surveys at once, and/or the dates for the parent and

youth surveys could differ. We identified a small number of instances when surveys were completed out of order; for example, completing Survey 2 before Survey 1. We recommend users consider deleting these from analysis. The table below lists the *src_subject_id* for these instances. We encourage users to check the *interview_date* variable to assess these issues. Surveys that were not completed (i.e., unfinished) have a blank *interview_date* variable.

Out of Order Surveys: *src_subject_id*

Youth		Parent	
Survey Order		Survey Order	
Survey 2 before Survey 1 N = 40	Survey 3 before Survey 2 N = 28	Survey 2 before Survey 1 N = 47	Survey 3 before Survey 2 N = 33
NDAR_INV1GXY5VKK	NDAR_INV0CZBUV4C	NDAR_INV08DNLREC	NDAR_INV08WDFUCE
NDAR_INV1R4KE1UN	NDAR_INV4JNMXAVB	NDAR_INV1GXY5VKK	NDAR_INV1G5DCM35
NDAR_INV1R97KJ7J	NDAR_INV5NPRNJAU	NDAR_INV1R4KE1UN	NDAR_INV5N40CFL4
NDAR_INV2DPX8P1Y	NDAR_INV6GNKZJJN	NDAR_INV1R97KJ7J	NDAR_INV5TJZTXMY
NDAR_INV4UZ9DDJH	NDAR_INV6X9N1DLT	NDAR_INV4UZ9DDJH	NDAR_INV6FD78Z13
NDAR_INV5DTVKE3L	NDAR_INV7WG3F8GT	NDAR_INV5TT0JL6Z	NDAR_INV6X9N1DLT
NDAR_INV6AC2J61C	NDAR_INV83PDDV47	NDAR_INV6BVVAY29	NDAR_INV7XVXWCME
NDAR_INV6BVVAY29	NDAR_INVB4TY8LVM	NDAR_INV6TAAAJ4F	NDAR_INV43M1L7PL
NDAR_INV6X9N1DLT	NDAR_INVBUBD3WNE	NDAR_INV6X9N1DLT	NDAR_INV59C91GGB
NDAR_INV7CN47GEF	NDAR_INV92APFZ2	NDAR_INV9Y0DDKT2	NDAR_INV61ZHGX4E
NDAR_INV8WBVLP6D	NDAR_INVFC12GLF0	NDAR_INV11ZVVFHK	NDAR_INV88PHXJ3C
NDAR_INVB4TY8LVM	NDAR_INVG5PC310E	NDAR_INV26D93Y6X	NDAR_INV2547FH92
NDAR_INVCGWV06JE	NDAR_INVKBLHAN4B	NDAR_INV69FLDML4	NDAR_INVAHBX7CYX
NDAR_INVCKPFP3N	NDAR_INVKJKYNK5V	NDAR_INVAB4VZUWB	NDAR_INVBTHWMF8T
NDAR_INVVCUTYZFH7	NDAR_INVKM0BYRA9	NDAR_INVB4TY8LVM	NDAR_INVBUBD3WNE
NDAR_INVVCVEWVJ5J	NDAR_INVKUTBPRE	NDAR_INVB61U9XZA	NDAR_INVG5PC310E
NDAR_INVED8PDZLE	NDAR_INVLFT2GG8	NDAR_INV9C9GR4GM4	NDAR_INVG5XLB72Y
NDAR_INVFC12GLF0	NDAR_INVMGJNC1PY	NDAR_INV176LYR4	NDAR_INVKJKYNK5V
NDAR_INVGF5M5HN2	NDAR_INV9LWMMB5	NDAR_INVVCUTYZFH7	NDAR_INVKM0BYRA9
NDAR_INVGPPUVVG4	NDAR_INVR3VTCE5	NDAR_INVVCVEWVJ5J	NDAR_INVLFT2GG8
NDAR_INVH1CG52NU	NDAR_INVR6R9DHFF	NDAR_INVFER29RGF	NDAR_INVLWD4W4KR
NDAR_INVHELBYLF5	NDAR_INVRBJT537E	NDAR_INVFH79L58P	NDAR_INVMGJNC1PY
NDAR_INVHMNN9G5J	NDAR_INVRMNE6ECK	NDAR_INVGLRPTNN	NDAR_INVNP0MNAB4
NDAR_INVJVAW0ZW5	NDAR_INVTZ6EYWUJ	NDAR_INVHELBYLF5	NDAR_INVNZZPEY3P
NDAR_INVK2KR1DUA	NDAR_INVV53R103B	NDAR_INVHMNN9G5J	NDAR_INVPK1G4FMB
NDAR_INVLCMU795T	NDAR_INVW5T73BJ9	NDAR_INVJVAW0ZW5	NDAR_INVPRZDG64U
NDAR_INVMMMLVDCJH	NDAR_INVVW58ZP6H	NDAR_INVKZT2PNJK	NDAR_INVTTZ6U1F
NDAR_INVMP5HZ1LF	NDAR_INVXVFTLZM9	NDAR_INVLC0TC7LX	NDAR_INVVFMWZYL
NDAR_INVN4G2HXY1		NDAR_INVLCMU795T	NDAR_INVXVFTLZM9

NDAR_INVNLE5Z05F		NDAR_INVLF8VTDV5	NDAR_INVYJG0V5F9
NDAR_INVPN3M8KBK		NDAR_INVLZHGW8V	NDAR_INVZ49WE025
NDAR_INVRP0XB0ZR		NDAR_INVMP5HZ1LF	NDAR_INVZJHF566H
NDAR_INVV2J19CN2		NDAR_INVNLE5Z05F	NDAR_INVZJKN66UT
NDAR_INVV4RPD9NA		NDAR_INVNLHUL300	
NDAR_INVV8YXGG31		NDAR_INVPMC2DEDN	
NDAR_INVVJG59G6B		NDAR_INVRP0XB0ZR	
NDAR_INVWHZ3DTNP		NDAR_INVRZBKNZ42	
NDAR_INVXB938J8E		NDAR_INVUGP7XGXD	
NDAR_INVXJEFUNEP		NDAR_INVUXX4B4ZL	
NDAR_INVYVMMMD41		NDAR_INVVJELFB43	
		NDAR_INVW2JAJB5C	
		NDAR_INVWHZ3DTNP	
		NDAR_INVX5384ZU4	
		NDAR_INVXB938J8E	
		NDAR_INVXP71CVE9	
		NDAR_INVY2YCRABT	
		NDAR_INVYVMMMD41	

Parent Substance Use Questions in Survey 2

In Survey 2, the *su_p_vape_use_cv*, *su_p_mj_vape_use_cv*, *su_p_mj_smoke_cv*, and *su_p_cig_use_cv* variables may not have been presented due to branching logic. If a question was not asked due to branching logic, the *su_p_cig_loc_cv__888*, *su_p_vape_loc_cv__888*, *su_p_mj_vape_loc_cv__888*, and *su_p_mj_smoke_loc_cv__888* will be coded as “1” to indicate this. We refer users to the data dictionary for additional details.

ABCD Study®, *Teen Brains. Today’s Science. Brighter Future®*, and the *ABCD Study Logo* are registered marks of the U.S. Department of Health & Human Services (HHS). *Adolescent Brain Cognitive DevelopmentSM Study* is a service mark of the U.S. Department of Health & Human Services (HHS).