

ABCD Human Subject Study

Adolescent Brain Cognitive Development – ABCDSTUDY.org

Release Notes: Adolescent Brain Cognitive Development StudySM (ABCD Study[®]) Data Release 4.0

Physical Health

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October 2021

Change Log

October 2021 – Data Release 4.0

- Initial release

List of Instruments

| Name of Instrument | Short Name |
|--|--------------|
| ABCD Pubertal Hormone Saliva | sph01 |
| ABCD Hormone Saliva Salimetric Scores | abcd_hsss01 |
| ABCD Youth Anthropometrics Modified from PhenX | abcd_ant01 |
| ABCD Youth Risk Behavior Survey Exercise Physical Activity | abcd_yrb01 |
| ABCD Youth Pubertal Development Scale and Menstrual Cycle Survey History (PDMS) | abcd_ypdms01 |
| ABCD Parent Pubertal Development Scale and Menstrual Cycle Survey History (PDMS) | abcd_ppdms01 |
| ABCD Parent Medical History Questionnaire (MHX) | abcd_mx01 |

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|--|-----------------|
| ABCD Longitudinal Parent Medical History Questionnaire | abcd_lpmh01 |
| ABCD Developmental History Questionnaire | dhx01 |
| ABCD Parent Medications Survey Inventory Modified from PhenX (PMP) | medsy01 |
| ABCD Parent Sleep Disturbance Scale for Children | abcd_sds01 |
| ABCD Parent Sports and Activities Involvement Questionnaire | abcd_saiq01 |
| ABCD Longitudinal Parent Sports and Activities Involvement Questionnaire | abcd_lpsaiq01 |
| ABCD Youth Snellen Vision Screener | abcd_svs01 |
| ABCD Youth Edinburgh Handedness Inventory Short Form | abcd_ehis01 |
| ABCD Child Nutrition Assessment | abcd_cna01 |
| ABCD Parent Ohio State Traumatic Brain Injury Screen Short Modified | abcd_otbi01 |
| ABCD Youth Genetic Blood (RUCDR) | biocf01 |
| ABCD Youth Blood Analysis | abcd_ybd01 |
| ABCD Youth Blood Pressure | abcd_bp01 |
| ABCD Pain Questionnaire | abcd_pq01 |
| ABCD Youth Munich Chronotype Questionnaire | abcd_mcqc01 |
| ABCD Youth Teeth Collection | bteeth01 |
| ABCD Longitudinal Parent Ohio State Traumatic Brain Injury Screen-Short Modified (OTBI) | abcd_lpohstbi01 |

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|---|-----------------------------|
| ABCD Sports Activities Read Music - Parent | sports_activ_read_music_p01 |
| ABCD Sports Activities Read/Music – Youth | sports_activ_read_music01 |
| ABCD International Physical Activity Questionnaire-Short | internat_physical_activ01 |
| Breastfeeding Questionnaire | breast_feeding01 |
| ABCD Sum Scores Traumatic Brain Injury | abcd_tbi01 |
| ABCD Longitudinal Summary Scores Traumatic Brain Injury | abcd_lsstbi01 |
| ABCD Sum Scores Parent Sports and Activities Involvement | abcd__spacss01 |
| ABCD Longitudinal Summary Scores Sports Activity | abcd_lsssa01 |
| ABCD Sum Scores Parent Medical History | abcd_medhxss01 |
| ABCD Longitudinal Summary Scores Medical History | abcd_lssmh01 |
| ABCD Sum Scores Developmental History | abcd_devhxss01 |
| ABCD Sum Scores Physical Health Parent | abcd_ssphp01 |
| ABCD Sum Scores Physical Health Youth | abcd_ssphy01 |

General Information

The following information refers to the Adolescent Brain Cognitive Development StudySM (ABCD) Data Release 4.0 available from <https://nda.nih.gov/abcd>. An overview of the ABCD Study[®] is at <https://abcdstudy.org> and detailed descriptions of the assessment protocols can be viewed at <https://abcdstudy.org/scientists/protocols>.

This document describes the contents of various instruments available for download. To understand the context of this information, see *Release Notes ABCD README FIRST* and *Release Notes ABCD Imaging Instruments*.

To access detailed information about the instruments administered in the physical health domain, the constructs they are intended to measure and relevant citations for each measure, please see: <https://www.sciencedirect.com/science/article/pii/S1878929317300683> and <https://www.sciencedirect.com/science/article/pii/S1878929317301822>

Instrument Descriptions

ABCD Youth Edinburgh Handedness Inventory Short Form (EHIS)

Handedness; laterality quotient; participants complete four self-report items to yield an estimate of handedness (right, mixed, left); details can be found in Veale, J.F. (2014). Edinburgh Handedness Inventory - Short Form: A revised version based on confirmatory factor analysis. *Laterality*, 19(2), 164-177. This instrument was not collected in the one- and two-year follow-up.

ABCD Youth Snellen Vision Screener (SVS)

Vision screening; the score is the last line correctly read on the Snellen chart without errors, with both eyes together, and using corrective lenses if needed; from Snellen, H. (1862). *Letterproeven tot Bepaling der Gezichtsscherpte*, Utrecht, Weyers (Dutch edition). Also published in many languages as *Optotypi ad Visum Determinandum* (Snellen, 1862). **ABCD Pubertal Hormone Saliva** - Information collected by RAs at the time of collecting oral fluid to indicate current estradiol, testosterone, and DHEA levels.

ABCD Hormone Saliva Salimetric Scores

Pubertal hormone levels (Estradiol, testosterone, and DHEA). Note that there are two testing “repetitions” for each test. The first repetition evaluates the adequacy of the sample for testing and provides the first testing for the presence of hormone. The second repetition provides quantification metrics of the hormone. Users will need to manually segregate analyses from different events.

ABCD Child Nutrition Assessment

The nutrition questionnaire is given to parents at one-year follow-up as a means of assessing the dietary patterns of participants during a typical week. It includes 13 questions on food

categories eaten and 2 questions on vitamin and folic acid supplement use by the biological mother (Morris, et. Al., 2015).

ABCD Youth Genetic Blood (RUCDR)

Information collected by RAs at the time of venipuncture blood collection for genetics studies (e.g., time of day of collection)

ABCD Youth Blood Analysis

This instrument summarizes whole blood analysis from two tubes for hemoglobin, A1C, CBC, total cholesterol, HDL cholesterol, and Ferritin.

ABCD Youth Blood Pressure

This instrument provides 3 consecutive blood pressure and pulse measurements, with a 1-minute interval between each reading, and the mean of the 3 blood pressure readings.

ABCD Pain Questionnaire

The CAPQ is based on the Seattle's Children's "Child and Adolescent Pain Questionnaire" and conforms to the NRS-11 standard for examining pain intensity over the past month, which is the recommended time-frame.

ABCD Youth Munich Chronotype Questionnaire

The MCTQ-C assesses chronotypes, which are diurnal preferences that manifest in personal sleep-wake rhythms, including sleep and wake schedules on school and free days.

ABCD Youth Teeth Collection

The total number of teeth collected from caregivers for youth participants.

ABCD Parent Sports and Activities Involvement Questionnaire

Involvement in sports, music, hobbies, art, theater, reading, and TBI risk. Parents were asked for how many years their child had participated in a given activity. The maximum allowed for this question was 10 years.

ABCD Longitudinal Parent Sports and Activities Involvement Questionnaire

Involvement in sports, music, hobbies, art, theater, reading, and TBI risk (update). Parents were asked for how many years their child had participated in a given activity. The maximum allowed for this question was 10 years.

ABCD Sports Activities Read Music – Parent and Youth

Separate parent and your reports that survey of their youth's participation in music and reading activities.

ABCD International Physical Activity Questionnaire-Short

The short form of the International Physical Activity Questionnaire is a parent report measure of the parent's level of physical activity. Booth, M.L. (2000). Assessment of Physical Activity: An International Perspective. Research Quarterly for Exercise and Sport, 71 (2): s114-20.

Breastfeeding Questionnaire

The Breastfeeding Questionnaire is a parent report survey of medication and substance use during breastfeeding of the participant. Based on Kessler, R.C., Avenevoli, S., et al., 2009b. National comorbidity survey replication adolescent supplement (NCS-A): II. Overview and design. J. Am. Acad. Child Adolesc. Psychiatry 48 (4), 380–385.

Summary Scores

Summary scores not clearly marked in other instruments can be found in the two instruments listed below. Prefixes used in summary score variable are listed at the end of each instrument name.

ABCD Sum Scores Physical Health Youth

ABCD Youth Pubertal Development Scale and Menstrual Cycle Survey History (PDS)

ABCD Sum Scores Physical Health Parent

ABCD Parent Pubertal Development Scale and Menstrual Cycle Survey History (PDS)
ABCD Child Nutrition Assessment (CNA)

References

Morris, M.C., Tangney, C.C., Wang, Y. et al. (2015) MIND diet associated with reduced incidence of Alzheimer's disease. Alzheimer's & Dementia (11) 1007-1014

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