

Adolescent Brain Cognitive Development®

6.0 DATA RELEASE:OVERVIEW, CURATION, & RESOURCES

The Adolescent Brain Cognitive Development Study 6.0 data release was made available in June 2025. The new release expands on the previous data resource by updating cumulative visit data and including new time points.

In pursuit of increased transparency and dataset utility, this year's release cycle also includes improvements in standardization, novel data access applications and analytic tools, as well as expanded documentation.

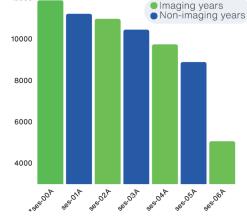
The dataset is available through the NIH Brain Development Cohorts (NBDC) Data Hub.

abcdstudy.org

6.0 Data release sample

Core study: The ABCD 6.0 Data Release includes data from 11,868 participants, complete through the 4year follow-up and nearly complete for the 5-year. The 5.5- and 6-year followups were ongoing at the data freeze (Jan 15, 2024) and include only participants who had assented by then.

Participants contributing data by event



ses-00A represents the baseline visit ses=session; A=annual; M=mid-year (not displayed)

Substudies: The release includes data from several substudies (e.g., Social Development, Endocannabinoids, Hurricane Irma, COVID-19, MR Spectroscopy). Some substudy events are aligned with main study events; others are on separate schedules.

Curation standards

Table-level standards

- Unique participant/session IDs (BIDS-compliant)
- Timestamps and participant age for temporal alignment

Variable-level standards

- Standardized labels, units, links to documentation, historic names added to data dictionary
 - Variable types: administrative, item, derived item, summary score
 - Measurement levels: nominal, ordinal, interval, ratio
- Consistent categorical coding for non-responses and binary variables

Categorical coding

0 No / None / False
1 Yes / True

Binary responses are standardized.

Standardized

non-response codes allow

444 Not applicable

555

999

666 Quantity not sufficient

Not administered

777 Decline to answer

Not asked due to branching logic

Don't know

missing data to be reliably identified for exclusion or analysis.

Naming convention

6.0 introduces a fully re-curated tabulated dataset with a standardized naming convention, improving consistency, & data structure.

Key Components

(separated by <u>single</u> underscores)

dm_s_tab_item

Domain: prefix indicating the core protocol domain or which substudy the variable belongs to (e.g., ph for Physical Health)

Source: single-letter indicating who provided data (e.g., y = youth)

Table: name of the measure or instrument (e.g. anthro)

Item: 3-digit number (e.g., 001), or a keyword (e.g., mean, dtt)

Subcomponents

(separated by additional underscores)

dm s tab kw kw item

dm_s_tab__kw__kw_Item
dm_s_tab_item__subitem
dm_s_tab_item__v01
dm s tab item 1

Keyword(s): groupings of items (e.g., subscales)

Subitem(s): branched variables

Version(s): subsequent versioning of items or subitems

Longitudinal marker: items altered slightly from initial administration

Summary scores

The code for all summary scores computed by the ABCD data center is available in the ABCDscores R package.

- Provides algorithms and code for transparency and reproducibility
- Links each data release to its
- corresponding code versionIncludes computation for 1690
- summary scores included in 6.0
- Flexible framework lets researchers compute provided scores or modify parameters to create custom ones



File structure

Tabulated data

- Curated database tables that represent the main assessment domains of the study, including:
 - Survey measures, biospecimens, task scores, ROI based imaging scores, etc.

File-based data

- Concatenated or individual-level* files of raw and processed data, including:
 - Imaging, genetics, wearable sensors, neurocognitive tasks, etc.

*Individual-level file-based data has been updated to follow the Brain Imaging Data Structure (BIDS) standard, with a few ABCD-specific modifications.

bids.neuroimaging.io

Data documentation

Provides detailed information about the ABCD data resource, including:

- Data quality and responsible use warnings
- Details on release instruments and variables
- Release-specific notes and known issues
 - General help and support resources
- Overview of data structure, including tabulated and file-based data types and directory organization



ABCD Data
Documentation
docs.abcdstudy.org



Data access & resources

The NBDC Data Hub offers integrated access to ABCD & HBCD Study data.

Utilize multiple applications to explore the study databases prior to obtaining a use certification. After certification use the same applications to download data.

For more information on data access and download visit the NBDC Data Hub website.



