Add Health
The National Longitudinal Study of Adolescent to Adult Health

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NIH Toolbox Cognition User Guide

Add CAPS
Add Health Cognitive Assesment, Physical, and Sensory Function

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1. Introduction

The National Longitudinal Study of Adolescent to Adult Health (Add Health) is a nationally representative sample of U.S. adolescents who were in grades 7-12 during the 1994-1995 school year. Using a complex, school-based cluster-sampling frame, researchers selected high school and feeder school pairs from 80 communities across the United States and drew a sex- and grade-stratified random sample of 20,745 adolescents for inclusion in the study. This sample has been followed from adolescence into early midlife across six waves of data collection to date, with the most recent wave of data collection (Wave VI) taking place between 2022 and 2025 when participants were ages 39 to 51, with an average age of 44.

Over the years, Add Health has collected a wealth of information from participants and their parents about demographic characteristics, familial structures, social relationships, health behaviors, cognition, physical and mental health status, medication usage, and health care access. Add Health also has collected anthropometric, cardiovascular, metabolic, renal, hepatic, inflammatory/immune, infectious, neurodegenerative, and multi-omic biomarkers from participants. In addition, Add Health has merged multilevel contextual data about the economic, school, neighborhood, policy, and environmental contexts in which the participants are embedded to the core survey and biological data at each wave. The Add Health dataset thereby provides researchers with rich opportunities to explore the causes and consequences of health status across multiple contextual domains as individuals age across the life course.

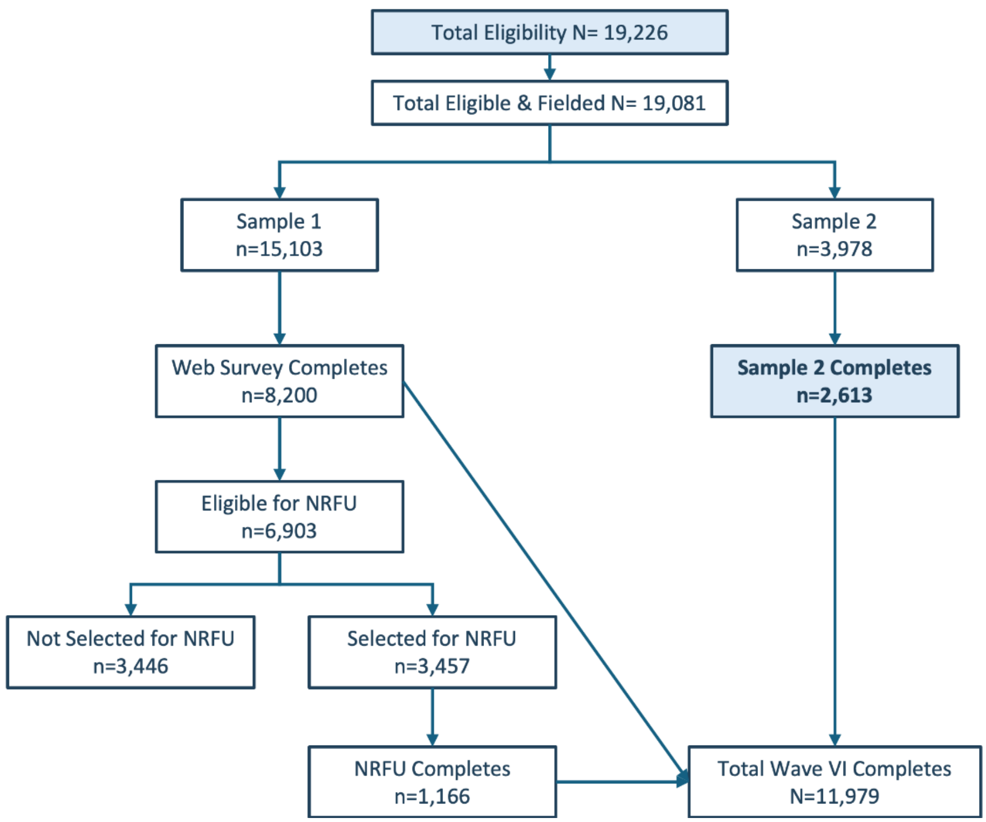
Given the breadth of measures and longitudinal design, Add Health offers a unique opportunity to explore the early origins of cognitive functioning and to track changes in dementia risk within a nationally representative cohort that has been followed since early adolescence. A key objective of Wave VI of Add Health was to significantly expand the measurement of cognitive domains. This wave introduced the Add Health Cognitive Assessment, Physical, and Sensory Function (Add CAPS) battery, designed to support long-term tracking of cognitive, physical, and sensory function. These data lay the groundwork for detecting early signs of cognitive impairment and risk for Alzheimer's disease and related dementias (AD/ADRD) in midlife. The full list of Add CAPS assessments can be found in **Table 1.**

Add CAPS User Guide	Add CAPS Data Set	Add CAPS Assessment	Cognitive Domain Measured
TestMyBrain	accb1_6.sas7bdat	Verbal Paired Associates	Episodic Memory
		Digit Symbol Matching	Processing Speed
		Gradual Onset Continuous Performance Test	Executive Functioning
		Backward Digit Span	Working Memory
NIH Toolbox Cognition	accb3_6.sas7bdat	Dimensional Change Card Sort Test	Executive Functioning
		Pattern Comparison Processing Speed Test	Processing Speed
		Picture Vocabulary Test	Language/Semantic Fluency
Interviewer-Administered Word Recall and Backward Digit Span	accb2_6.sas7bdat	Immediate Word Recall	Episodic Memory
		Delayed Word Recall	Episodic Memory
		Backward Digit Span	Working Memory
Animal Naming Test	acaf_6.sas7bdat	Animal Naming Test	Language/Semantic Fluency
Sensory Function	acsb_6.sas7bdat	hearX hearTest	
Physical Function	acpb_6.sas7bdat	Handgrip Strength	

Table 1. Wave VI Add CAPS assessments and corresponding datasets and User Guides.

Add Health Wave VI was divided into two nationally representative subsamples: Sample 1 and Sample 2 (as detailed in the Sampling and Mixed-Mode Survey Design User Guide; see Hummer et al. 2025). The breakdown of Wave VI sample assignments can be seen in **Figure 1.** Sample 1 members received a primarily web-based, two-phase mixed-mode design, which included web-based cognitive assessments (see the TestMyBrain User Guide (Aiello et al. 2025)). Sample 2 members (N=2,613) received an in-person interview which included the Sample 1 survey content plus in-person cognitive, physical, and sensory functioning assessments (the remaining Add CAPS assessments). At the end of Sample 2 data collection, a small number of Sample 2 members who could not schedule an in-person interview were permitted to complete the web survey and thus did not receive the in-person Add CAPS assessments (N=70).

Figure 1: Overview of Wave VI Sample Design and Completes



NIH Toolbox assessments were conducted only among Sample 2 participants (N=2,613). Data included in the NIH Toolbox dataset can be linked to the full survey data with the Sample 2 Mixed-Mode Survey data file (w6s2.sas7bdat), described in the Wave VI Sampling and Mixed-Mode Survey User Guide (Hummer et al. 2025) and the Wave VI Sample 2: Mixed-Mode Survey Codebook (https://addhealth.cpc.unc.edu/wp-content/uploads/docs/restricted_use/WaveVISample2MixedModeSurveyCodebook.pdf). For cross-sectional estimations of the Add CAPS assessments in Sample 2, optimized Sample 2 weights have been created (variable GSW6_2) and should be used in all corresponding analyses. For further details on the weighting methodology and usage recommendations, please see the

Guide to Using Cross-Sectional and Longitudinal Weights in Add Health Wave VI (see Liao et al. 2025).

The inclusion of the *NIH Toolbox Cognition Battery* (NIH Toolbox® Administrator's Manual, iPad App v1.23+) in Add Health Wave VI, reflects our commitment to collecting in-person digital cognitive measures in early midlife among a nationally representative sample, outside of a clinical setting. This approach also enables comparisons between the standard in-person cognitive assessments (e.g. immediate word recall) and digital neuropsychology measures, helping to evaluate the feasibility and value of in-person digital cognitive testing at scale in Add Health.

2. General Overview of NIH Toolbox Cognition Version 2

The NIH Toolbox Cognition battery is a suite of digital cognitive assessment administered in-person via iPad. Version 2 of the NIH Toolbox was used during the Add Health Wave VI data collection period and was accessed via the NIH Toolbox application on a 9th generation iPad (Wi-Fi only, 64 GB), iOS 16 – 18 throughout data collection. The full testing battery was administered by a trained Field Interviewer and included three cognitive assessments, in the following order:

1. NIH Toolbox Dimensional Change Card Sort Test (Age 12+ v2.1)
2. NIH Toolbox Pattern Comparison Processing Speed Test (Age 7+ v2.1)
3. NIH Toolbox Picture Vocabulary Test (Age 3+ v2.1, Remote Admin)

The full Version 2 NIH Toolbox Cognitive Function Battery (Age 12+) takes approximately 31 minutes to administer, excluding setup time. For our study, which involved participants aged 39–51, we selected specific tests from the full battery to create a custom Add Health Wave VI cognition battery. This tailored set focused on Processing Speed, Executive Function, and Language—key domains identified through a comprehensive literature review, an evaluation of digital cognitive assessments, and expert consultation. All selected tests meet the 2014 Standards for Educational and Psychological Testing established by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014).

Full details for all the NIH Toolbox V2 cognitive assessments can be found on the NIH Toolbox website and in their own documentation, here: https://resources.nihtoolbox.org/manuals-and-test-materials/nih-toolbox-documentation/ . Please note that users will need to register for an account to access the files.

3. Dimensional Change Card Sort Test

3.1 Rationale

The NIH Toolbox Dimensional Change Card Sort Test (Dimensional Change Card Sort Test; Age 12+, v2.1) is a self-administered, digital cognitive assessment that measures executive function. This domain is particularly relevant to the Add Health Wave VI study population, as it underpins goal-directed thinking, behavior, and emotional regulation through processes such as cognitive flexibility, inhibitory control, and working memory (Zelazo et al, 2014).

3.2 Measurement and Protocol

In the NIH Toolbox Dimensional Change Card Sort Test, participants were shown two target images that differed in both shape and color. Study interviewers instructed participants to match a series of test images (e.g., white ships, orange rabbits; see **Figure 2**) to the target images, beginning with one characteristic (e.g., shape) and then, after several trials, switching to the other (e.g., color). A cue word (e.g., shape or color) appeared on the screen during each trial to indicate the sorting dimension. Before starting the test, participants were trained on using “Home Base”-a designated spot on the screen where they placed their finger between trials. While participants were instructed to return to Home Base before each new trial, they were not reminded to do so during the test period.

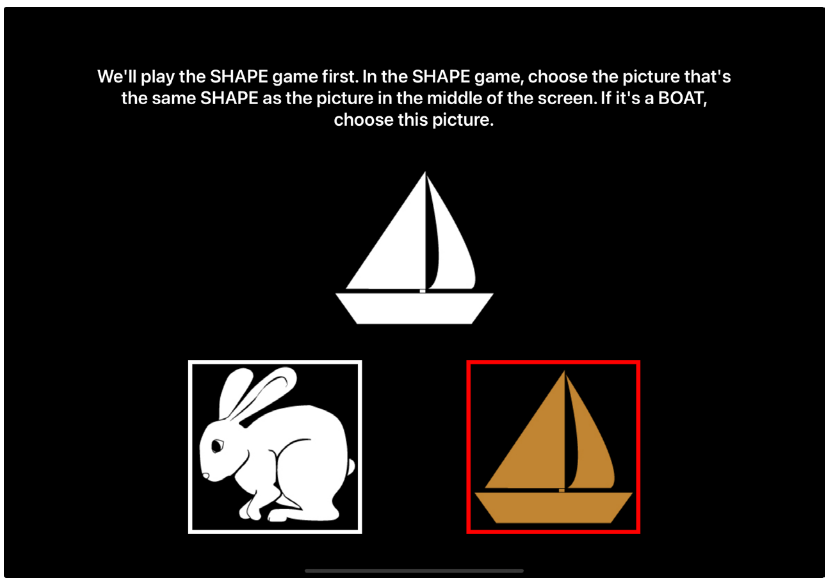


Figure 3. Screenshot of part of Dimensional Change Card Sort instructions.

Practice items:

Participants completed four practice trials focusing on each dimension: color and shape. If a participant answered incorrectly, an audio prompt encouraged them to select the correct image: “This is the same shape/color, so you should choose this box”. Conversely, a separate audio segment played whenever the participant answered a practice item correctly: “That’s right”.

Test items:

If there was no response after ten seconds, the program automatically moved on to the next trial. The test trials included a mixed block of 30 items that varied in shape and color. More detailed test instructions are outlined in the NIH Toolbox V2 administration manual on pages 122-123.

3.3 Variable Construction

The variables created by NIH Toolbox for Dimensional Change Card Sort Test are detailed on their website, alongside comprehensive scoring and interpretation guides (NIH Toolbox Scoring & Interpretation Guide). The following set of Dimensional Change Card Sort Test variables have been included in the dataset for Add Health users:

3.3.1. Raw Score [C6DCCS1]

The number of correct responses.

3.3.2. Computed Score [C6DCCS2]

Computed scores range between 0 and 10, taking into account both accuracy and reaction time. Accuracy score (range 0-5) = 0.125*number of correct responses (maximum number of correct responses = 40). Reaction time score (range 0-5) is only calculated if participants' accuracy was greater than 80% (accuracy score > 4). The reaction time score is scaled in a way such that higher scores reflect shorter reaction times. Therefore, the computed score is calculated using the formula below:

If accuracy score < 4, computed score = accuracy score.

If accuracy score > = 4, computed score = accuracy score + reaction time score.

Higher computed scores for the Dimensional Change Card Sort Test indicate better performance. More details have been published by NIH Toolbox in their Scoring and Interpretation Guide (NIH Toolbox Scoring & Interpretation Guide)**. This is the recommended primary research outcome.**

3.3.3. Duration – Dimensional Change Card Sort [C6DCCSTS]

The total duration it took for the participant to start and finish Dimensional Change Card Sort, in seconds.

While standardized scores have been used with the NIH Toolbox in the past, we noted several concerns with their application in this context. Therefore, only raw scores and the accompanying computed scores, where appropriate, are provided to users. When working with these unstandardized scores, we encourage careful consideration, particularly with respect to extreme values and potential skewness in the distributions. Although the data are roughly normally distributed in many cases, users may wish to conduct additional assessments for outliers.

3.4 Quality Control

Dimensional Change Card Sort Test scores were reviewed weekly throughout Wave VI to monitor missing data, outliers, and the overall distribution of values. Cases with a relatively high or low score, based on NIH Toolbox standardization process, were flagged and reviewed to ensure that they were valid responses. Overall, 11% of cases were flagged based on this criteria, but none were removed. Correlations with other cognitive variables, in particular those measuring the corresponding cognitive domain, were also reviewed on a weekly basis to ensure associations were in the direction and magnitude expected.

3.4.1 Qualitative Flag 1 [C6DCCSF1]

Tests were flagged with Qualitative Flag 1 if a distraction or interruption occurred during the test.

3.4.2 Qualitative Flag 2 [C6DCCSF2]

Tests were flagged with Qualitative Flag 2 when an interviewer capture issue was reported.

3.4.3 Qualitative Flag 3 [C6DCCSF3]

Tests were flagged with Qualitative Flag 3 when a technical issue occurred.

3.4.4 Qualitative Flag 4 [C6DCCSF4]

Tests were flagged with Qualitative Flag 4 when the participant reported physical impairment or pain.

3.4.5 Qualitative Flag 5 [C6DCCSF5]

Tests were flagged with Qualitative Flag 5 when an administration or instruction issue occurred.

3.4.6 Qualitative Flag 6 [C6DCCSF6]

Tests were flagged with Qualitative Flag 6 when the participant reported fatigue or displayed low effort.

3.4.7 Time Flag 1 [C6DCCSTF]

Flag indicating whether the test was unexpectedly long or short in duration.

3.4.8 Time Flag 2 [H6DCCST*x*]

Flag assigned if duration is unexpectedly long or short for one of the following reasons:

- Technical difficulties [H6DCCST1]
- Participant took a break [H6DCCST2]
- Interruption [H6DCCST3]
- Did not complete test [H6DCCST4]
- Did not understand instructions [H6DCCST5]
- Physical or cognitive disability [H6DCCST6]
- Other [H6DCCST7]
- Refused to participate [H6DCCST8]

3.5 Recommended variable usage

We recommend that participants use the Dimensional Change Card Sort Test "computed score" (C6DCCS2) for analysis. A *higher* value of C6DCCS2 indicates better cognitive performance.

*note: We are not including the NIH Toolbox "standardized scores" because the standardization was based on a relatively small sample of individuals in the Add Health age range. Given limitations of the standardization process and based on guidance from the NIH Toolbox team, we do not provide any of the standardized Dimensional Change Card Sort scores to users.

4. Pattern Comparison Processing Speed Test

4.1 Rationale

The NIH Toolbox Pattern Comparison Processing Speed Test (Age 7+ v2.1) is a, self-administered digital cognitive assessment that measures processing speed. The domain of processing speed, or the amount of time required to complete a task, is important for the Add Health Wave VI study population because it is sensitive to impairments in neurological function and follows a well-defined trajectory over the lifespan (Carlozzi et al, 2015). Furthermore, processing speed performance increases throughout childhood and adolescence, peaks in early adulthood, and declines throughout adulthood and older age.

4.2 Measurement and Protocol

The NIH Toolbox Pattern Comparison Processing Speed Test tasks participants with determining if two adjacent images are identical. The participants respond by clicking either the "yes" or "no" button on the screen (see **Figure 3**). Pre-recorded audio instructions to the participant come from the device (iPad) for the Pattern Comparison test.

Practice items:

Participants were given six untimed practice trials. If a participant continued to make an error after being corrected on two practice items, the test was discontinued.

Test items:

The test ended when 130 trials had been displayed, or 85 seconds had passed. If a participant was engaged with a final item when the time limit is reached, they were allowed to finish that question. Some participants needed reminders to remain focused on the task. For both test and practice items, if there was no response in 10 seconds, the pre-recorded audio asks: "Are these the same?" More detailed test instructions are outlined in [the NIH Toolbox V2 administration manual] on pages 132-133.

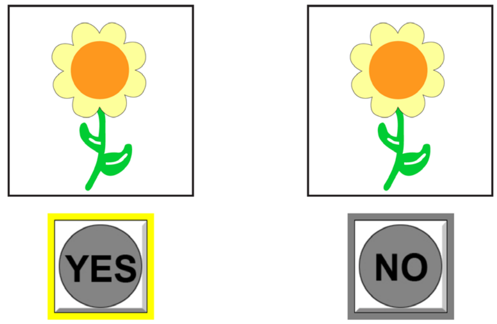


Figure 4. Screenshot of example Pattern Comparison Processing Speed Test question.

4.3 Variable Construction

The variables created by NIH Toolbox for the Pattern Comparison Processing Speed Test (PC) are detailed on their website, alongside comprehensive details regarding scoring and interpretation (NIH Toolbox Scoring & Interpretation Guide). The following set of PC variables were considered to be relevant for Add Health users and have been included in the dataset.

4.3.1. Raw Score [C6PC1]

The participant’s raw score is the number of items answered correctly in 85 seconds of response time, with a range of 0-130. **This is the recommended primary research outcome.**

4.3.2. Computed Score [C6PC2]

The participant’s computed pattern comparison score is calculated using a linear transformation from NIH Toolbox, after which the highest score (the raw score or the calculated score) is taken as the computed score.

4.3.3. Duration – Pattern Comparison [C6PCTS]

The total duration it took participant to start and finish PC.

4.4 Quality Control

Pattern Comparison scores were reviewed weekly throughout Wave VI to monitor missing data, outliers, and the overall distribution. Cases with a relatively high or low score, based on NIH Toolbox standardization process, were flagged and reviewed to ensure that they were valid responses. Correlations with other cognitive variables, in particular those measuring the corresponding cognitive domain, were also reviewed on a weekly basis to ensure associations were in the direction and magnitude expected.

Pattern Comparison had a larger-than-expected proportion of cases flagged for being unexpectedly high (i.e. uncorrected standardized score > 130). After further investigation and discussion with the NIH Toolbox team, it was determined that this was not a cause for concern but that these standardized scores should not be used for data analysis, as the standardization algorithm for NIH Toolbox V2, based on a small sample size of normative scores for this Add Health Wave VI age range, skews the score distribution very high.

4.4.1 Qualitative Flag 1 [C6PCF1]

Tests were flagged with Qualitative Flag 1 if a distraction or interruption occurred during the test.

4.4.2 Qualitative Flag 2 [C6PCF2]

Tests were flagged with Qualitative Flag 2 when an interviewer capture issue was reported.

4.4.3 Qualitative Flag 3 [C6PCF3]

Tests were flagged with Qualitative Flag 3 when a technical issue occurred.

4.4.4 Qualitative Flag 4 [C6PCF4]

Tests were flagged with Qualitative Flag 4 when the participant reported physical impairment or pain.

4.4.5 Qualitative Flag 5 [C6PCF5]

Tests were flagged with Qualitative Flag 5 when an administration or instruction issue occurred.

4.4.6 Qualitative Flag 6 [C6PCF6]

Tests were flagged with Qualitative Flag 6 when the participant reported fatigue or displayed low effort.

4.4.7 Time Flag 1 [C6PCTF]

Flag indicating whether the test was unexpectedly long or short in duration.

4.4.8 Time Flag 2 [H6PCT*x*]

Flag assigned if duration is unexpectedly long or short for one of the following reasons:

- Technical difficulties [H6PCT1]
- Participant took a break [H6PCT2]
- Interruption [H6PCT3]
- Did not complete test [H6PCT4]
- Did not understand instructions [H6PCT5]
- Physical or cognitive disability [H6PCT6]
- Other [H6PCT7]
- Refused to participate [H6PCT8]

4.5 Recommended variable usage

We recommend that users use the following variable for analyses: PC Raw score [C6PC1]. A *higher* value of C6PC1 indicates better cognitive performance.

*note: We are not including the NIH Toolbox "standardized scores" because the standardization was based on a relatively small sample of individuals in the Add Health age range. Given limitations of the standardization process and based on guidance from the NIH Toolbox team, we do not provide any of the standardized Pattern Comparison scores to users.

5. Picture Vocabulary Test

5.1 Rationale

The NIH Toolbox Picture Vocabulary Test (Age 3+ v2.1, Remote Admin) is a self-administered digital cognitive assessment that measures language. The domain of language is important for the Add Health Wave VI study population because mastery of language skills is an important predictor of daily functioning and health (Gershon et al., 2013).

5.2 Measurement and Protocol

For the NIH Toolbox Picture Vocabulary Test, on the iPad screen, the participants viewed four pictures while an audio recording played a word (see **Figure 4**). Instructions were shown on the iPad screen and read aloud by the interviewer. Participants were asked to tap the picture that best represented the word's meaning. If the participant needed to hear the word again they could press the play again button at the bottom of each screen.

Practice items:

There were two practice items. The interviewer read the instructions and gave the participant up to three opportunities to answer the practice items correctly. After three unsuccessful attempts, the interviewer touched the correct answer.

Test items:

Due to the variable-length computer-adaptive test used in the test, participants encountered different numbers of items. The group of pictures shown and the specific words presented were tailored to each participant's performance. Generally, the assessment lasted around 5 minutes and included about 25 items. The computer administered each item individually, without a time limit for each trial, until the test concluded. More detailed test instructions are outlined in the NIH Toolbox V2 administration manual on pages 63-65.

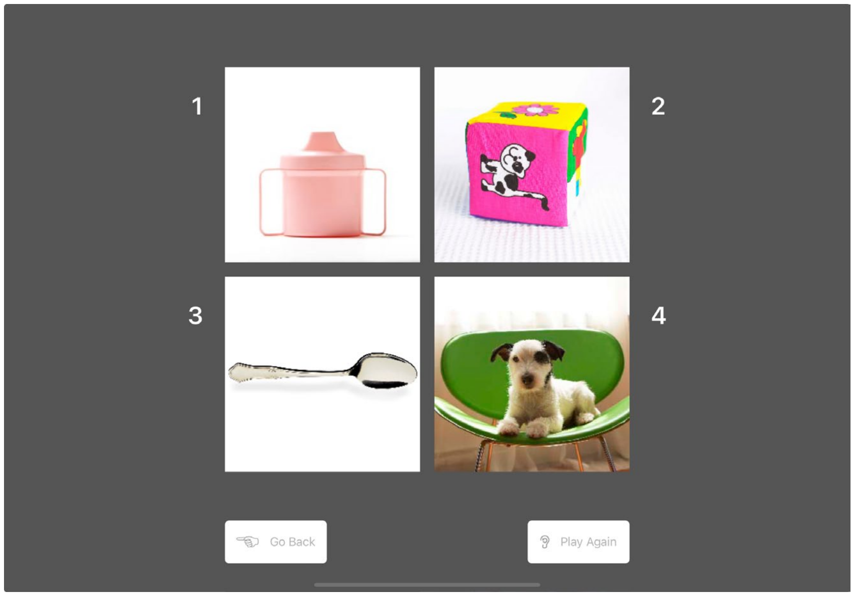


Figure 5. Screenshot of example Picture Vocabulary Test question.

5.3 Variable Construction

The variables created by NIH Toolbox for the Picture Vocabulary Test are detailed on their website, alongside comprehensive scoring and interpretation guides (NIH Toolbox). The following set of Picture Vocabulary Test variables were considered to be relevant for Add Health users and have been included in the dataset.

5.3.1. Theta [C6PVT1]

Picture Vocabulary Test is scored using Item Response Theory. A theta score is calculated for participants, which represents the relative overall ability/performance of the participant. This is similar to a z-score (mean = 0, standard deviation = 1). **This is the recommended primary research outcome.**

5.3.2. Duration – Picture Vocabulary Test [C6PVTTS]

The total duration it took the participant to start and finish PC.

5.4 Quality Control

Picture Vocabulary Test scores were reviewed weekly throughout Wave VI to monitor missing data, outliers, and the overall distribution. Cases with a relatively high or low score, based on the expected mean and standard deviation of Picture Vocabulary Test Theta values across participants, were flagged and reviewed to ensure that they were valid responses. A total of 6% of cases were flagged and reviewed based on these criteria, but none were removed. Correlations with other cognitive variables, in particular those measuring the corresponding cognitive domain, were also reviewed on a weekly basis to ensure associations were in the direction and magnitude expected.

5.4.1 Qualitative Flag 1 [C6PVTF1]

Tests were flagged with Qualitative Flag 1 if a distraction or interruption occurred during the test.

5.4.2 Qualitative Flag 2 [C6PVTF2]

Tests were flagged with Qualitative Flag 2 when an interviewer capture issue was reported.

5.4.3 Qualitative Flag 3 [C6PVTF3]

Tests were flagged with Qualitative Flag 3 when a technical issue occurred.

5.4.4 Qualitative Flag 4 [C6PVTF4]

Tests were flagged with Qualitative Flag 4 when the participant reported physical impairment or pain.

5.4.5 Qualitative Flag 5 [C6PVTF5]

Tests were flagged with Qualitative Flag 5 when an administration or instruction issue occurred.

5.4.6 Qualitative Flag 6 [C6PVTF6]

Tests were flagged with Qualitative Flag 6 when the participant reported fatigue or displayed low effort.

5.4.7 Time Flag 1 [C6PVTTF]

Flag indicating whether the test was unexpectedly long or short in duration.

5.4.8 Time Flag 2 [H6PVTT*x*]

Flag assigned if duration is unexpectedly long or short for one of the following reasons:

- Technical difficulties [H6PVTT1]
- Participant took a break [H6PVTT2]
- Interruption [H6PVTT3]
- Did not complete test [H6PVTT4]
- Did not understand instructions [H6PVTT5]
- Physical or cognitive disability [H6PVTT6]
- Other [H6PVTT7]
- Refused to participate [H6PVTT8]

5.5 Recommended variable usage

We recommend that participants use the Picture Vocabulary Test Theta (C6PVT1) for analysis. A *higher* value of C6PVT1 indicates better cognitive performance.

6. The NIH Toolbox Cognition Data File (accb3_6.sas7bdat)

6.1 Structure

The structure of the disseminated NIH Toolbox data file is flat. This means that it is a participant-level data file, wherein each participant has one and only one record. The participant identifier (AID) will appear in the data file only once.

6.2 Contents

The NIH Toolbox data file includes the variables below, which are describe in the corresponding codebook documentation that also contains frequencies.

Variable	Label
AID	RESPONDENT IDENTIFIER NUMBER
C6DCCS1	S15C CB3 DCCS RAWSCORE-W6
C6DCCS2	S15C CB3 DCCS COMPUTED SCORE-W6
C6DCCSF1	S15C CB3 DCCS DISTRACTION OR INTERRUPTION-W6
C6DCCSF2	S15C CB3 DCCS FI CAPTURE ISSUES-W6
C6DCCSF3	S15C CB3 DCCS TECHNICAL ISSUE-W6
C6DCCSF4	S15C CB3 DCCS PHYSICAL IMPAIRMENT OR PAIN-W6
C6DCCSF5	S15C CB3 DCCS ADMINISTRATION OR INSTRUCTION-W6
C6DCCSF6	S15C CB3 DCCS FATIGUE OR LOW EFFORT-W6
C6DCCSTF	S15C CB3 DCCS DURATION FLAG-W6
C6DCCSTS	S15C CB3 DCCS DURATION SECONDS-W6
C6PC1	S15C CB3 PC RAWSCORE-W6
C6PC2	S15C CB3 PC COMPUTED SCORE-W6
C6PCF1	S15C CB3 PC DISTRACTION OR INTERRUPTION-W6
C6PCF2	S15C CB3 PC FI CAPTURE ISSUES-W6
C6PCF3	S15C CB3 PC TECHNICAL ISSUE-W6
C6PCF4	S15C CB3 PC PHYSICAL IMPAIRMENT OR PAIN-W6
C6PCF5	S15C CB3 PC ADMINISTRATION OR INSTRUCTION-W6
C6PCF6	S15C CB3 PC FATIGUE OR LOW EFFORT-W6
C6PCTF	S15C CB3 PC DURATION FLAG-W6
C6PCTS	S15C CB3 PC DURATION SECONDS-W6
C6PVT1	S15C CB3 PVT THETA-W6
C6PVTF1	S15C CB3 PVT DISTRACTION OR INTERRUPTION-W6
C6PVTF2	S15C CB3 PVT FI CAPTURE ISSUES-W6
C6PVTF3	S15C CB3 PVT TECHNICAL ISSUE-W6
C6PVTF4	S15C CB3 PVT PHYSICAL IMPAIRMENT OR PAIN-W6
C6PVTF5	S15C CB3 PVT ADMINISTRATION OR INSTRUCTION-W6
C6PVTF6	S15C CB3 PVT FATIGUE OR LOW EFFORT-W6
C6PVTTF	S15C CB3 PVT DURATION FLAG-W6
C6PVTTS	S15C CB3 PVT DURATION SECONDS-W6
H6DCCST1	S15CQ1A CB3 DCCS TECHNICAL DIFFICULTIES-W6
H6DCCST2	S15CQ1B CB3 DCCS TOOK A BREAK-W6
H6DCCST3	S15CQ1C CB3 DCCS INTERRUPTION DURING ANY TESTS-W6
H6DCCST4	S15CQ1D CB3 DCCS DID NOT COMPLETE ALL TESTS-W6
H6DCCST5	S15CQ1E CB3 DCCS DID NOT UNDERSTAND INSTRUCT-W6
H6DCCST6	S15CQ1F CB3 DCCS PHYSICAL/COGNITIVE DISABILITY-W6
H6DCCST7	S15CQ1G CB3 DCCS SOME OTHER REASON(S)-W6

H6DCCST8	S15CQ1H CB3 DCCS REFUSED TO PARTICIPATE-W6
H6PCT1	S15CQ2A CB3 PC TECHNICAL DIFFICULTIES-W6
H6PCT2	S15CQ2B CB3 PC TOOK A BREAK-W6
H6PCT3	S15CQ2C CB3 PC INTERRUPTION DURING ANY TESTS-W6
H6PCT4	S15CQ2D CB3 PC DID NOT COMPLETE ALL TESTS-W6
H6PCT5	S15CQ2E CB3 PC DID NOT UNDERSTAND INSTRUCT-W6
H6PCT6	S15CQ2F CB3 PC PHYSICAL/COGNITIVE DISABILITY-W6
H6PCT7	S15CQ2G CB3 PC SOME OTHER REASON(S)-W6
H6PCT8	S15CQ2H CB3 PC REFUSED TO PARTICIPATE-W6
H6PVTT1	S15CQ3A CB3 PVT TECHNICAL DIFFICULTIES-W6
H6PVTT2	S15CQ3B CB3 PVT TOOK A BREAK-W6
H6PVTT3	S15CQ3C CB3 PVT INTERRUPTION DURING ANY TESTS-W6
H6PVTT4	S15CQ3D CB3 PVT DID NOT COMPLETE ALL TESTS-W6
H6PVTT5	S15CQ3E CB3 PVT DID NOT UNDERSTAND INSTRUCT-W6
H6PVTT6	S15CQ3F CB3 PVT PHYSICAL/COGNITIVE DISABILITY-W6
H6PVTT7	S15CQ3G CB3 PVT SOME OTHER REASON(S)-W6
H6PVTT8	S15CQ3H CB3 PVT REFUSED TO PARTICIPATE-W6

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