Add Health
The National Longitudinal Study of Adolescent to Adult Health

Report prepared by

Allison E. Aiello

Rebecca C. Stebbins

Cherese N.B. Parker

Farizah I. Rob

Robert A. Hummer

Interviewer-Administered Word Recall and Backward Digit Span User Guide

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

UNC CAROLINA POPULATION CENTER

CAROLINA POPULATION CENTER | CAROLINA SQUARE - SUITE 210 | 123 WEST FRANKLIN STREET | CHAPEL HILL, NC 27516

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Important Note: The above acknowledgement should be included in all presentations and publications using data from Wave VI of Add Health.

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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.

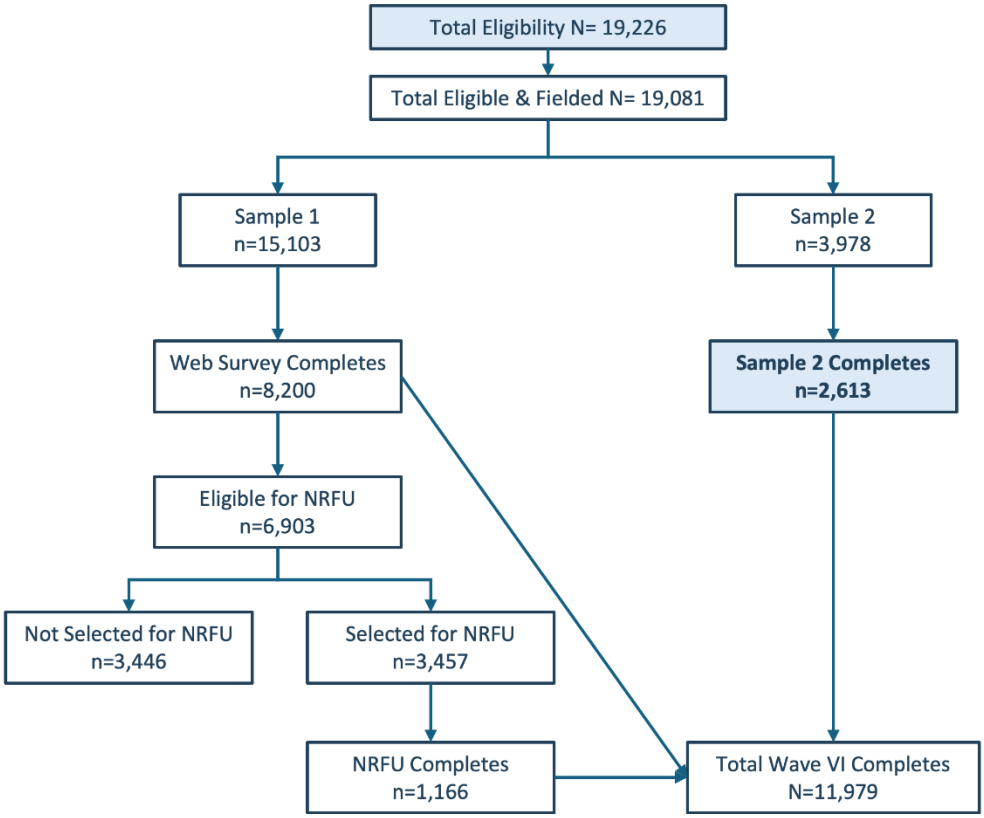
Given the breadth of measures and longitudinal design, Add Health offers a unique opportunity to explore the early origins of cognitive functioning and to track changes in dementia risk within a nationally representative cohort that has been followed since early adolescence. A key objective of Wave VI of Add Health was to significantly expand the measurement of cognitive domains and create opportunities for longitudinal analyses by repeating existing cognitive function measures. 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



Immediate and delayed recall and backward digit span were conducted only among Sample 2 participants (N=2,613). Data included in the Interviewer-Administered Word Recall and Backward Digit Span 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 longitudinal analyses for interviewer-administered word recall and backward digit span, users should use the optimized longitudinal Wave VI Grand

sample weight for I-IV-V-VI (GSW1456_2T). 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 interviewer-administered word recall (immediate and delayed) and backward digit span assessments in Add Health Wave VI reflects our commitment to collecting prospective, in-home neurological measures in early midlife among a nationally representative sample. These three measures have been administered consistently across three waves of Add Health to date, allowing for longitudinal assessment since Wave IV. By using standard interviewer-administered neurological assessment practices, this approach also facilitates comparison with similar in-person measures collected in other nationally-representative studies.

2. Overview of Waves IV and V Cognitive Tests

The tests described in this User Guide and available in the corresponding public-use dataset were also conducted in Waves IV and V of Add Health. In Waves IV and V, participants completed three tests to measure the cognitive domain of memory, similar to Wave VI: immediate word recall, delayed word recall, and backward digit span (See **Tables 1** and **2** for longitudinal N's across waves). Participants were asked to recall a list of 15 words twice – immediately after being told the list of words, and again a few minutes later. This approach mirrors the Word Recall tasks in Wave VI. The score, or the number of correct words, was reported by the interviewer, along with the number of incorrect words said by the participant and the number of words repeated during the immediate and delayed recall periods. For backward digit span in Waves IV and V, participants were given a sequence of numbers and then asked to repeat that sequence backwards. If the participant responded correctly, the next sequence provided was increased in length by one digit. After one incorrect response at a given length, a second sequence of the same length was provided. After a second incorrect response at that length, the test ended. Sequences ranged from two to eight digits. The final score was the number of sequences that the participant correctly reversed.

3. Immediate and Delayed Word Recall

3.1 Rationale

The Word Recall task was included in the AddCAPS battery to measure episodic memory, a cognitive domain that is known to decline with age and is predictive of dementia risk. Episodic memory, the ability to learn new information and recall it later, is often one of the first cognitive domains to show subtle signs of decline (Nyberg & Pudas, 2019). Performance on immediate and delayed recall of word lists is a widely used and validated indicator of memory function (Gavett & Horwitz, 2012). Its inclusion in Add Health was motivated by a large body of epidemiological evidence showing that lower word-list recall scores are associated with later life cognitive decline (Palmer et al., 2003; Weissberger et al., 2017). Higher word recall performance tends to correlate with cognitive protective factors such as education and social engagement (Du et al., 2023, Williams et al, 2021, Zamarian et al. 2021).

By including a word recall task in Wave VI, Add Health establishes a baseline for midlife memory performance that can be compared to normative expectations and tracked over time. The word recall task serves as a brief but powerful instrument for capturing variance in memory ability among participants, providing insight into cognition in midlife.

3.2 Measurement and Protocol

Add Health Wave VI administered an Immediate and Delayed Word Recall task adapted from standard neurocognitive batteries. The protocol involved the interviewer reading a list of common, unrelated words to the participant and then asking the participant to recall as many as possible. Specifically, the interviewer said, “I am going to read a list of 15 words. Listen carefully. When I am finished, you are to repeat as many of the words as you can remember. It does not matter in what order you repeat them. Just try to remember as many as you can. I will say each word only one time, and I cannot repeat any words. We will hear a buzzer when time is up.”

The list consisted of 15 nouns, one word presented at a time at a steady pace of about one word per second. Immediately after reading the list, a 90-second recall period began. The participant was prompted, “Now tell me as many words as you can remember.”

As the participant named words, the interviewer marked each correct word on a scoring sheet. If the participant paused before the time was up, the interviewer encouraged with a neutral prompt: “Can you think of any more?”.

After the immediate recall, the interviewer continued with a distractor list of questions that were pertinent to the survey to introduce a delay. After the participant was done answering these questions (which took an average of 1.2 minutes) the participant was again asked to recall the words, “Do you remember the list of 15 words that I read to you a few minutes ago? I want you to tell me as many of the words from that list as you can.” Participants were given 60 seconds for this delayed recall attempt. The interviewer recorded the words recalled on a second scoring sheet.

Of note, the same 15 word list has been used since Wave IV allowing for direct comparisons but with a small potential for learning effects every five years or so.

3.3 Audio Recording Review & Variable Construction

The data team followed a standardized scoring process to validate the scores reported by the interviewer: the data team listened to all available audio recordings from the interview and manually transcribed each word the participant said during the 90- and 60-second recall windows. When the data team was unable to transcribe responses, due to missing or unclear audio files, the score was instead based on a manual review of the words the interviewer checked off during the assessment and directly entered into the survey system.

3.3.1 Immediate Word Recall duration [C6CB21TS]

The duration of immediate word recall task, in seconds.

3.3.2 Delayed Word Recall duration [C6CB22TS]

The duration of delayed word recall task, in seconds.

3.3.3 Immediate Word Recall score [C6WD90_1]

The number of words recalled immediately after hearing the word list.

During the in-person Sample 2 interviews, the interviewer has the list of words they use to check off the words correctly recalled from the list.

The plural forms of these words were also accepted, and only the first instance of the word counted toward the score (range 0-15). The participant had 90 seconds to recall as many words back to the interviewer as they could. The words listed by the participant were checked off, by the interviewer, on a list, and that data was used to calculate the initial score. After manually reviewing recordings and scoring the tests, the data team delivered the final Immediate Word Recall score.

3.3.4 Delayed Word Recall score [C6WD60_1]

The number of words recalled after a delay of 1 -2 minutes.

This test was conducted after the Immediate Word Recall task and after several survey questions set in between the tests to provide a delay. The interviewer asked the participant to recall as many words as they could remember from the Immediate Word Recall task list in 60 seconds. The interviewer did not read the word list again to the participant. The same scoring criteria for Immediate Word Recall were applied, with a total score range of 0-15. The data team went through the same scoring process as the Immediate Word Recall score to deliver the final Delayed Word Recall score.

3.3.5 Qualitative Flag 1 [C6CB21F1 (Immediate), C6CB22F1 (Delayed)]

Tests were flagged with QualFlag1 if a distraction or interruption occurred during the test.

3.3.6 Qualitative Flag 2 [C6CB21F2 (Immediate), C6CB22F2 (Delayed)]

Tests were flagged with QualFlag2 when an interviewer capture issue was reported.

3.3.7 Qualitative Flag 3 [C6CB21F3 (Immediate), C6CB22F3 (Delayed)]

Tests were flagged with QualFlag3 when a technical issue occurred.

3.3.8 Qualitative Flag 4 [C6CB21F4 (Immediate), C6CB22F4 (Delayed)]

Tests were flagged with QualFlag4 when the participant reported physical impairment or pain.

3.3.9 Qualitative Flag 5 [C6CB21F5 (Immediate), C6CB22F5 (Delayed)]

Tests were flagged with QualFlag5 when an administration or instruction issue occurred.

3.3.10 Qualitative Flag 6 [C6CB21F6 (Immediate), C6CB22F6 (Delayed)]

Tests were flagged with QualFlag6 when the participant reported fatigue or displayed low effort.

3.3.11 Time Flag 1 [C6CB21TS (Immediate), C6CB22TS (Delayed)]

Flag assigned if test was an unexpectedly long or short duration

3.3.12 Time Flag 2 [H6CB21T*x* (Immediate), H6CB22T*x* (Delayed)]

Flag assigned if duration is extreme for one of the following reasons:

- Technical difficulties [H6CB21T1 (Immediate), H6CB22T1 (Delayed)]
- Participant took a break [H6CB21T2 (Immediate), H6CB22T2 (Delayed)]
- Interruption [H6CB21T3 (Immediate), H6CB22T3 (Delayed)]
- Did not complete test [H6CB21T4 (Immediate), H6CB22T4 (Delayed)]
- Did not understand instructions [H6CB21T5 (Immediate), H6CB22T5 (Delayed)]
- Physical or cognitive disability [H6CB21T6 (Immediate), H6CB22T6 (Delayed)]
- Other [H6CB21T7 (Immediate), H6CB22T7 (Delayed)]
- Refused to participate [H6CB21T8 (Immediate), H6CB22T8 (Delayed)]

3.3.13 Immediate Word Recall Flag [C6WD90Q1]

Cases were flagged if the Immediate Word Recall score was based on the manual review of the interviewer-entered words rather than manual review of the audio recording.

3.3.14 Delayed Word Recall Flag [C6WD60Q1]

Cases were flagged if the Delayed Word Recall score was based on the manual review of the interviewer-entered words rather than manual review of the audio recording.

3.4 Quality Control

Word recall scores were plotted over time, statistically summarized, and reviewed weekly throughout Wave VI to monitor missing data, outliers, and the overall distribution.

3.5 Harmonization with Waves IV and V

Immediate and delayed word recall tasks were administered in a manner equivalent to the administration of these tests in Waves IV and V of Add Health, including the same list of 15 words used at each wave. The main difference between prior waves and Wave VI is the scoring process: in Wave VI, tests were scored via audio review, for a gold-standard score, instead of relying only on written data provided by the interviewer as was done in Waves IV and V. The scores are therefore harmonizable across waves and may be used for longitudinal analysis. **Table 2** provides the number of participants with valid immediate and delayed word recall data across waves of Add Health.

Table 2. Word recall data sample sizes available for Waves IV – VI of Add Health

Assessment	Wave IV (N)	Wave V (N)	Wave VI (N)	Overlap across all waves (IV-VI) N
Immediate Word Recall	15,654	1,705	2,536	826
Delayed Word Recall	15,639	1,701	2,532	823

4. Backward Digit Span

4.1 Rationale

The Backward Digit Span task is included as a measure of working memory. Working memory, the ability to temporarily hold information in mind and manipulate it, is a core component of executive function that underpins many higher-order cognitive abilities. It is well-established that working memory shows age-related declines even in healthy adults, independent of episodic memory. Specifically, backward digit span performance tends to decline with advancing age due to reduced working memory efficiency (Hester et al., 2004).

By measuring backward digit span at Wave VI, Add Health provides a baseline of midlife working memory. Including the backward digit span allows researchers to examine individual differences in working memory in the Add Health cohort and to investigate how these relate to other health, behavioral, and environmental factors. Backward digit span provides a practical, well-validated index of working memory capacity in a large population-study setting, enriching the cognitive profile of participants alongside episodic memory and processing speed measures.

4.2 Measurement and Protocol

Add Health Wave VI administered the Backward Digit Span test as part of the cognitive assessment for participants who completed the survey via an interviewer home visit in Sample 2.

The interviewer explained the task to the participant: “In this next exercise, I am going to say some strings of numbers, and when I am done I would like you to repeat them backwards, in the reverse order from which I said them. So if I said ‘3, 8,’ you would say ‘8, 3’. Do you understand? The sets will get larger as we go.”

During the test, the interviewer read predetermined sequences of digits aloud at a rate of about one digit per second. After each sequence, the participant attempted to recite the digits in reverse order from memory.

The test began with sequences of two digits and increased in length as the participant succeeded, up to a maximum sequence length of 8 digits. Participants were given a sequence of numbers and then asked to repeat that sequence backwards. If the participant responded correctly, the next sequence provided was increased in length by one digit. After one incorrect response at a given length, a second sequence of the same length was provided.

After a second incorrect response at that length, the test ended. Sequences ranged from two to eight digits. The final score was the number of sequences that the participant correctly reversed.

4.3 Variable Construction

4.3.1 Backward Digit Span duration [C6CB23TS]

The duration of the backward digit span test, in seconds.

4.3.2 Backward Digit Span score [C6NUMSCR]

The backward digit span score is equal to the number of digits of the longest digit span successfully recalled in reverse order at least once by the participant. For example, if a participant correctly reversed a 6-digit sequence on either attempt but failed both 7-digit sequences, their backward digit span score would be 6.

4.3.3 Qualitative Flag 1[C6CB23F1]

Tests were flagged with QualFlag1 if a distraction or interruption occurred during the test.

4.3.4 Qualitative Flag 2 [C6CB23F2]

Tests were flagged with QualFlag2 when an interviewer capture issue was reported.

4.3.5 Qualitative Flag 3 [C6CB23F3]

Tests were flagged with QualFlag3 when a technical issue occurred.

4.3.6 Qualitative Flag 4 [C6CB23F4]

Tests were flagged with QualFlag4 when the participant reported physical impairment or pain.

4.3.7 Qualitative Flag 5 [C6CB23F5]

Tests were flagged with QualFlag5 when an administration or instruction issue occurred.

4.3.8 Qualitative Flag 6 [C6CB23F6]

Tests were flagged with QualFlag6 when the participant reported fatigue or displayed low effort.

4.3.9 Time Flag 1 [C6CB23TF]

Flag assigned if test was an unexpectedly long or short duration

4.3.10 Time Flag 2 [H6CB23T*x*]

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

- Technical difficulties [H6CB23T1]
- Participant took a break [H6CB23T2]
- Interruption [H6CB23T3]

- Did not complete test [H6CB23T4]
- Did not understand instructions [H6CB23T5]
- Physical or cognitive disability [H6CB23T6]
- Other [H6CB23T7]
- Refused to participate [H6CB23T8]

4.4 Quality Control

Backward Digit Span scores were plotted over time, statistically summarized, and reviewed weekly throughout Wave VI to monitor missing data, outliers, and the overall distribution.

4.5 Harmonization with Waves IV and V

The backward digit span test in Wave VI was administered in a manner equivalent to the administration of this test in Waves IV and V of Add Health. Therefore, the scores are harmonizable across waves and may be used for longitudinal analysis.

Table 3. Backward digit span data sample sizes available for Waves IV – VI of Add Health

Assessment	Wave IV (N)	Wave V (N)	Wave VI (N)	Overlap across all waves (IV-VI) N
Backward Digit Span	15,677	1,716	2,534	828

4.6 Comparison with TestMyBrain Backward Digit Span

There are two key scoring differences to be aware of when comparing the in-person backward digit span with the TestMyBrain (TMB) version:

1. Scoring scale offset
    - The in-person score ranges from 0 to 7, where 0 indicates that no digit strings were reversed correctly, 1 indicates one correct string (two digits correctly reversed), and so on.
    - The TMB backward digit span score ranges from 1 to 12, where 1 indicates that no strings were reversed correctly, and increases from there.
    - To harmonize with the in-person score, subtract 1 from the TMB backward digit span score.
2. Maximum span length difference
    - The TMB Backward Digit Span test continues up to 11-digit strings, whereas the in-person assessment stops at 8 digit strings.
    - We suggest top-coding the TMB Backward Digit Span score at 7 to be comparable to the in-person Backward Digit Span.

5. Survey Memory Questions and other Cognitive Data

Of note, subjective reports of memory were asked of both Sample 1 and Sample 2 participants as part of the main Add Health Wave VI survey. These data can be found in Section 4: Health Care and Illness dataset, variables H6DA18B, H6DA18C, H6DA18D, H6DA18E, and H6DA18F. Additional cognitive function measures completed by Sample 2 participants only, can be found in our additional Add CAPS users guides, including the TestMyBrain User Guide, the NIH Toolbox Cognition User Guide, and the Animal Fluency User Guide.

6. The Interviewer-Administered Cognitive Data File (accb2_6.sas7bdat)

6.1 Structure

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

6.2 Contents

Variable Name	**Variable Description**
AID	Participant Identifier
C6CB21F1	Immediate Word Recall: Flag indicating that there was a distraction or interruption
C6CB21F2	Immediate Word Recall: Flag indicating that there were interviewer capture issues
C6CB21F3	Immediate Word Recall: Flag indicating that there were technical issues
C6CB21F4	Immediate Word Recall: Flag indicating that participant had physical impairment or pain
C6CB21F5	Immediate Word Recall: Flag indicating issues with administration or instruction
C6CB21F6	Immediate Word Recall: Flag indicating low effort or fatigue
C6CB21TF	Immediate Word Recall: Was the test duration as expected, shorter than expected, or longer than expected
C6CB21TS	Immediate Word Recall: Duration of the test (seconds)
C6CB22F1	Delayed Word Recall: Flag indicating that there was a distraction or interruption
C6CB22F2	Delayed Word Recall: Flag indicating that there were interviewer capture issues
C6CB22F3	Delayed Word Recall: Flag indicating that there were technical issues
C6CB22F4	Delayed Word Recall: Flag indicating that participant had physical impairment or pain
C6CB22F5	Delayed Word Recall: Flag indicating issues with administration or instruction
C6CB22F6	Delayed Word Recall: Flag indicating low effort or fatigue
C6CB22TF	Delayed Word Recall: Was the test duration as expected, shorter than expected, or longer than expected
C6CB22TS	Delayed Word Recall: Duration of the test (seconds)
C6CB23F1	Backward Digit Span: Flag indicating that there was a distraction or interruption
C6CB23F2	Backward Digit Span: Flag indicating that there were interviewer capture issues
C6CB23F3	Backward Digit Span: Flag indicating that there were technical issues
C6CB23F4	Backward Digit Span: Flag indicating that participant had physical impairment or pain
C6CB23F5	Backward Digit Span: Flag indicating issues with administration or instruction

C6CB23F6	Backward Digit Span: Flag indicating low effort or fatigue
C6CB23TF	Backward Digit Span: Was the test duration as expected, shorter than expected, or longer than expected
C6CB23TS	Backward Digit Span: Duration of the test (seconds)
C6NUMSCR	Backward Digit Span: Number of digits correctly reversed (span)
C6WD60_1	Delayed Word Recall: Number of words recalled by participant
C6WD60_2	Delayed Word Recall: Number of words participant named that were not on the provided list
C6WD60_3	Delayed Word Recall: Number of words participant repeated
C6WD60Q1	Delayed Word Recall: Flag indicating that score was not constructed from the audio recording
C6WD90_1	Immediate Word Recall: Number of words recalled by participant
C6WD90_2	Immediate Word Recall: Number of words participant named that were not on the provided list
C6WD90_3	Immediate Word Recall: Number of words participant repeated
C6WD90Q1	Immediate Word Recall: Flag indicating that score was not constructed from the audio recording
H6CB21T1	Immediate Word Recall: Flag indicating technical difficulties
H6CB21T2	Immediate Word Recall: Flag indicating participant took a break
H6CB21T3	Immediate Word Recall: Flag indicating interruption during testing
H6CB21T4	Immediate Word Recall: Flag indicating participant did not complete all tests
H6CB21T5	Immediate Word Recall: Flag indicating participant did not understand instructions
H6CB21T6	Immediate Word Recall: Flag indicating participant had physical / cognitive disability
H6CB21T7	Immediate Word Recall: Flag indicating some other reason affected duration
H6CB21T8	Immediate Word Recall: Flag indicating participant refused to participate
H6CB22T1	Delayed Word Recall: Flag indicating technical difficulties
H6CB22T2	Delayed Word Recall: Flag indicating participant took a break
H6CB22T3	Delayed Word Recall: Flag indicating interruption during testing
H6CB22T4	Delayed Word Recall: Flag indicating participant did not complete all tests
H6CB22T5	Delayed Word Recall: Flag indicating participant did not understand instructions
H6CB22T6	Delayed Word Recall: Flag indicating participant had physical / cognitive disability
H6CB22T7	Delayed Word Recall: Flag indicating some other reason affected duration
H6CB22T8	Delayed Word Recall: Flag indicating participant refused to participate
H6CB232A	Backward Digit Span: flag indicating use of the sequence: 2-4
H6CB232B	Backward Digit Span: flag indicating use of the sequence: 5-7
H6CB233A	Backward Digit Span: flag indicating use of the sequence: 6-2-9
H6CB233B	Backward Digit Span: flag indicating use of the sequence: 4-1-5
H6CB234A	Backward Digit Span: flag indicating use of the sequence: 3-2-7-9
H6CB234B	Backward Digit Span: flag indicating use of the sequence: 4-9-6-8
H6CB235A	Backward Digit Span: flag indicating use of the sequence: 1-5-2-8-6
H6CB235B	Backward Digit Span: flag indicating use of the sequence: 6-1-8-4-3
H6CB236A	Backward Digit Span: flag indicating use of the sequence: 5-3-9-4-1-8
H6CB236B	Backward Digit Span: flag indicating use of the sequence: 7-2-4-8-5-6

H6CB237A	Backward Digit Span: flag indicating use of the sequence: 8-1-2-9-3-6-5
H6CB237B	Backward Digit Span: flag indicating use of the sequence: 4-7-3-9-1-2-8
H6CB238A	Backward Digit Span: flag indicating use of the sequence: 9-4-3-7-6-2-5-8
H6CB238B	Backward Digit Span: flag indicating use of the sequence: 7-2-8-1-9-6-5-3
H6CB23T1	Backward Digit Span: Flag indicating technical difficulties
H6CB23T2	Backward Digit Span: Flag indicating participant took a break
H6CB23T3	Backward Digit Span: Flag indicating interruption during testing
H6CB23T4	Backward Digit Span: Flag indicating participant did not complete all tests
H6CB23T5	Backward Digit Span: Flag indicating participant did not understand instructions
H6CB23T6	Backward Digit Span: Flag indicating participant had physical / cognitive disability
H6CB23T7	Backward Digit Span: Flag indicating some other reason affected duration
H6CB23T8	Backward Digit Span: Flag indicating participant refused to participate

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