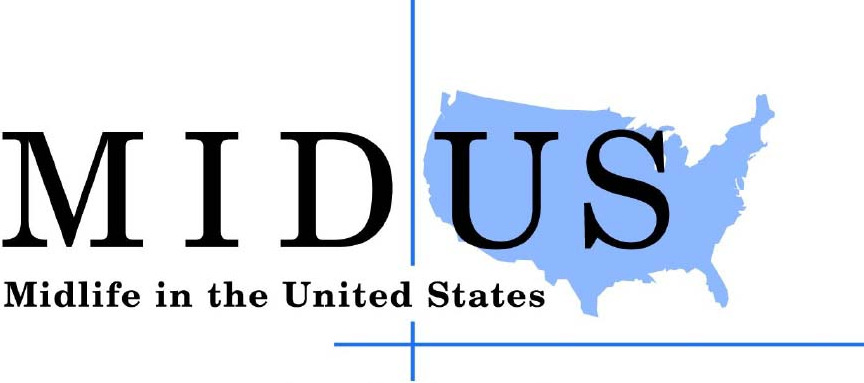
**MIDUS 3 PROJECT 7**

**Retention and Early Warning Project (REW):**

**README**

**General Introduction to the REW Cognitive Test Battery**

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This document serves as a general introduction for the reader to the cognitive test data in the MIDUS 3 REW project. Cognitive testing was carried out using a reduced version of the Brief Test of Adult Cognition by Telephone (BTACT) with 5 subtests. Data collected via the BTACT interview are included in the aggregate REW dataset: M3\_P7\_REW\_N651\_20200914

For more information about the BTACT instrument see:

* Lifespan Lab Website*:* [*http://www.brandeis.edu/departments/psych/lachman/instruments/index.html*](http://www.brandeis.edu/departments/psych/lachman/instruments/index.html)
* Monitoring cognitive functioning: Psychometric properties of the Brief Test of Adult Cognition by Telephone (published article; doi: 10.1177/1073191113508807)

[*http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4050038/*](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4050038/)

*and Change in Cognitive Performance from Midlife into Old Age: Findings from the Midlife in the United States (MIDUS) Study.* doi: [10.1017/S1355617718000425](https://dx.doi.org/10.1017%2FS1355617718000425)

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**A. Notes about the sample**

1. Note that the data file contains the case id numbers for all participants who completed any of the cognitive subtests, even if they did not have complete data for all subtests. Thus, the total N may vary slightly from subtest to subtest.

2. The following cases terminated the telephone interview during the cognitive testing. We have included them in the dataset to provide the largest possible sample for each specific subtest. If you would like to analyze the sample for those who completed the cognitive interview, you should omit the following cases from your analyses: 15579, 10224, 14504, 17502, 16172, 18128, 12434, 16951, 14961, 14940.

**B. Notes about the BTACT data subtests**

The REW BTACT includes 5 subtests that provide an index of cognitive function in domains of key importance in cognitive aging. The Digit Span Backwards and the Stop and Go Switch Task were not given to the REW sample.

The five BTACT subtests provide accuracy data (i.e., number of correct answers). The cognitive battery was developed, processed, cleaned, and scored by Project 3 staff. The battery was administered in a telephone interview. The data are labeled with “C7” which corresponds to MIDUS 3/ Project 7 (REW sample).

**1. Immediate word list recall *(tests episodic verbal memory)***

Although participants hear only 15 words, the data fields for the immediate and delayed word recall tests each include 26 variables to allow for 15 list words and up to 11 possible repetitions (reporting a list item more than once) and intrusions (reporting non-list items). We use ‘90’ as a code for intrusions (a measure of interest) to distinguish these from inapplicable responses.We measure total number of unique responses up to 15 (C7TWLITU), as well as total number of repetitions (C7TWLITR)and intrusions (C7TWLITI).

**2. Category fluency *(tests verbal ability and speed and executive functioning)***

The primary measure of interest is total number of unique responses (C7TCTFLU).

**3. Number series *(tests fluid intelligence/ reasoning)***

We give the actual number of the answer given for each of the 5 items (C7TNS1, C7TNS2, C7TNS3, C7TNS4, C7TNS5), the accuracy of each response (C7TNS1C, C7TNS2C, C7TNS3C, C7TNS4C, C7TNS5C), as well as total correct (C7TNSTOT).

**4. Backward counting *(tests speed of processing)***

The primary measure of interest is the number of items correctly reported (C7TBKTOT). This is derived from the last number reached (C7BKCT), taking off points for errors (numbers omitted or reported erroneously, out of the correct sequence; C7BKERR). The total correct is calculated as C7TBKTOT = (100 – (C7BKCT + C7BKERR)).

**5. Delayed word list recall *(tests episodic verbal memory/forgetting)***

This is given as the last subtest. As with immediate recall there are 26 fields to allow for repetitions and intrusions. Measures of interest are total number of unique items recalled up to 15 (C7TWLDTU), as well as repetitions (C7TWLDTR) and intrusions (C7TWLDTI).

**C. Naming conventions for BTACT variables**

For the MIDUS REW Cognitive the first character of each variable name will be “C”. Otherwise, the same naming conventions developed for MIDUS 3 apply.

a) 1st letter – “C,” to indicate MIDUS 3

b) 2nd letter – indicates REW project number 7

c) 3rd letter – indicates type of test: T= BTACT cognitive tests

d) 4th, 5th, 6th, 7th, 8th letters – indicates either:

i. The individual test:

- WLI: Word List Recall – Immediate (Note: Columns 7 & 8 indicate response number; 1-26 possible responses)

- CTFL: Category Fluency (also CTF)

- NS: Number Series (Note: Column 6 indicates trial number 1-5)

- BK: Backward Counting

- WLD: Word List Recall – Delayed (Note: Columns 7 & 8 indicate response number; 1-26 possible responses)

iii. A flag variable: Variables with “FP” as their 7th and 8th characters serve as flag variables for potentially problematic cases. This variable indicates, by test, which cases were identified at Brandeis by our data cleaning as being problematic due to test disruption, interview equipment failures, or other problems. We recommend users exclude these tests for these specific cases.

*Note:* **Bold** variable names below indicate composite or total scale scores.

|  |  |  |
| --- | --- | --- |
| **VARIABLE NAME** | **VARIABLE LABEL** | **VALUES** |
|  | | |
| **Word List Recall: Immediate** | | |
| C7TWLIFP | Word List Immediate flagged problematic? | 1=YES  2=NO  8=REFUSED/MISSING |
| C7TWLI1 … C7TWLI26 | Word List Immediate: Recalled #1 … #26 (allows for max 15 correct responses + up to 11 intrusions/repetitions) | 1=Word#1  2= Word#2  3= Word#3  4= Word#4  5= Word#5  6= Word#6  7= Word#7  8= Word#8  9= Word#9  10= Word#10  11= Word#11  12= Word#12  13= Word#13  14= Word#14  15= Word#15  90=NON-LIST INTRUSION  98=REFUSED/MISSING |
| **C7TWLITU** | Word List Immediate: Tot Unique Items | Range: 0 to 15;  Sum of all correct, unique responses from C7TWLI1 to C7TWLI26  98=REFUSED/MISSING |
| **C7TWLITR** | Word List Immediate: Tot # Repetitions | Sum of all repeated responses from C7TWLI1 to C7TWLI26  98=REFUSED/MISSING |
| **C7TWLITI** | Word List Immediate: Tot # Intrusions | Sum of all non-list intrusions from C7TWLI1 to C7TWLI26  98=REFUSED/MISSING |

|  |  |  |
| --- | --- | --- |
| **Category Fluency** | | |
| C7TCTFFP | Category Fluency flagged problematic? | 1=YES  2=NO  8=REFUSED/MISSING |
| **C7TCTFLU** | Category Fluency: Tot Unique Items | Sum of all in-category, unique items named  98=REFUSED/MISSING |
| **C7TCTFLR** | Category Fluency: Tot # Repetitions | Sum of repeated items named in-category  98=REFUSED/MISSING |
| **C7TCTFLI** | Category Fluency: Tot # Intrusions | Sum of all non-category intrusions  98=REFUSED/MISSING |
| **Number Series** | | |
| C7TNSFP | Number Series flagged problematic? | 1=YES  2=NO  8=REFUSED/MISSING |
| C7TNS1 … C7TNS5 | Number Series: #1…#5 (number reported) | 997=DON’T KNOW  998=REFUSED/MISSING |
| C7TNS1C… C7TNS5C | Number Series #1…#5: correct? | 1=YES, CORRECT  2=NO, INCORRECT  8=REFUSED/MISSING |
| **C7TNSTOT** | Number Series: Tot Correct | Range: 0 to 5;  8=REFUSED/MISSING |
| **Backward Counting** | | |
| C7TBKFP | Backward Counting flagged problematic? | 1=YES  2=NO  8=REFUSED/MISSING |
| C7TBKCT | Backward Counting: last # reached | 998=REFUSED/MISSING |
| C7TBKERR | Backward Counting: # of errors | 998=REFUSED/MISSING |
| **C7TBKTOT** | BK: (100-(C7TBKCT + C7TBKERR)) | Total correct #s produced  998=REFUSED/MISSING |

|  |  |  |
| --- | --- | --- |
| **Word List Recall-Delayed** | | |
| C7TWLDFP | Word List Delayed flagged problematic? | 1=YES  2=NO  8=REFUSED/MISSING |
| C7TWLD1… C7TWLD26 | Word List Delayed: Recalled #1…#26  (allows for max 15 correct responses + up to 11 intrusions/repetitions) | 1=Word#1  2= Word#2  3= Word#3  4= Word#4  5= Word#5  6= Word#6  7= Word#7  8= Word#8  9= Word#9  10= Word#10  11= Word#11  12= Word#12  13= Word#13  14= Word#14  15= Word#15  90=NON-LIST INTRUSION  98=REFUSED/MISSING |
| **C7TWLDTU** | Word List Delayed: Tot Unique Items | Range: 0 to 15;  Sum of all correct, unique responses from C7TWLD1 to C7TWLD26  98=REFUSED/MISSING |
| **C7TWLDTR** | Word List Delayed: Tot # Repetitions | Sum of all repeated responses from C7TWLD1 to C7TWLD26  98=REFUSED/MISSING |
| **C7TWLDTI** | Word List Delayed: Tot # Intrusions | Sum of all non-list intrusions from C7TWLD1 to C7TWLD26  98=REFUSED/MISSING |

Note that the REW version of the BTACT includes 5 subtests. It does not include the digit span backwards or the Stop and Go Switch Task.