

	<b>Overall</b>	<b>Controls</b>	<b>MCI</b>	<b>AD-Dementia</b>	<b>bvFTD</b>
<b>UDS3-EF</b>	305	96	84	87	38
<b>EXAMINER</b>	265	96	79	86	4
<b>Modified Trails</b>	248	89	71	58	30
<b>Design Fluency</b>	277	93	73	77	34
<b>Letter Fluency (D-Words)</b>	276	93	72	78	33
<b>15-Item Boston Naming Test</b>	275	92	72	77	34
<b>VOSP Number Location</b>	271	93	71	73	34
<b>Craft Story (%Retention)</b>	234	90	65	50	29
<b>Benson Figure (%Retention)</b>	280	93	74	78	35

**Supplemental Table A. Sample size per test per study group**

**Abbrev:** AD – Alzheimer’s disease, bvFTD – behavioral variant frontotemporal dementia, EXAMINER – Executive Abilities: Measurement and Instruments for Neurobehavioral Evaluation and Research, UDS3-EF – Uniform Data Set v3.0 Executive Function composite score, VOSP – Visual Object Spatial Perception

	Overall	Controls	MCI	AD-Dementia	bvFTD
<b>UDS3-EF<sup>a</sup></b>	-1.29 (1.58)	0.08 (0.90)	-0.92 (0.99)	-2.54 (1.32)	-2.72 (1.16)
<b>NIH EXAMINER Composite<sup>b</sup></b>	0.22 (1.03)	0.97 (0.58)	0.34 (0.82)	-0.68 (0.86)	-0.90 (0.70)
<b>Modified Trails</b>	-0.49 (1.29)	0.40 (1.01)	-0.62 (-1.40, 0.07)	-1.88 (-2.37, -0.94)	-0.92 (1.08)
<b>Design Fluency</b>	-0.57 (1.30)	0.34 (0.93)	-0.32 (1.11)	-1.56 (0.96)	-1.40 (1.20)
<b>Letter Fluency (D-Words)</b>	-0.73 (1.27)	-0.07 (1.13)	-0.49 (0.99)	-1.49 (-2.16, -0.61)	-1.71 (1.06)
<b>VOSP Number Location</b>	-0.04 (-0.79, 0.71)	0.71 (-0.04, 0.71)	-0.04 (-0.04, 0.71)	-0.79 (-2.29, -0.04)	-0.04 (-0.79, 0.71)
<b>15-Item Boston Naming</b>	-0.26 (-1.22, 0.70)	0.70 (-0.26, 0.70)	-0.26 (-1.22, 0.70)	-1.22 (-3.13, 0.22)	-3.61 (-10.80, -0.26)
<b>Craft Story (%Retention)</b>	-0.73 (-2.46, 0.31)	-0.07 (-0.47, 0.55)	-1.02 (-2.13, -0.10)	-4.58 (-5.20, -1.53)	-2.72 (2.32)
<b>Benson Figure (%Retention)</b>	-1.07 (1.84)	0.46 (0.85)	-1.12 (1.55)	-2.95 (-4.00, -1.64)	-1.63 (2.09)
<b>Grey Matter Volumes (N)</b>	210	75	48	55	39
<b>Frontal Lobe</b>	-0.28 (1.25)	0.33 (1.00)	-0.03 (1.06)	-0.63 (0.86)	-1.34 (1.53)
<b>Parietal Lobe</b>	-0.31 (1.13)	0.28 (1.00)	-0.14 (0.98)	-0.93 (0.90)	-0.87 (1.17)
<b>Temporal Lobe</b>	-0.56 (1.28)	0.25 (1.01)	-0.22 (0.91)	-0.98 (0.84)	-2.03 (1.17)
<b>Occipital Lobe</b>	-0.13 (1.04)	0.26 (1.07)	-0.11 (1.07)	-0.42 (0.82)	-0.56 (0.97)
<b>DLPFC</b>	-0.29 (1.24)	0.30 (1.03)	-0.09 (1.04)	-0.73 (0.96)	-1.13 (1.52)
<b>ACC</b>	-0.27 (1.23)	0.34 (0.98)	-0.12 (0.99)	-0.36 (0.93)	-1.58 (1.33)
<b>OFC</b>	-0.36 (1.38)	0.32 (0.99)	0.00 (1.04)	-0.60 (0.91)	-1.85 (1.75)
<b>Pericalcarine Cortex</b>	-0.09 (1.02)	0.19 (1.06)	-0.02 (1.05)	-0.21 (0.81)	-0.55 (0.99)

<sup>a</sup>Z-scores based on NACC dataset development sample; <sup>b</sup>Z-scores based on test manual normative sample distribution

**Supplemental Table B:** Standardized (z-score) values for each cognitive and structural MRI outcome stratified by functional diagnostic group. Unless otherwise noted, z-scores (unadjusted) are based on means and standard deviations of an independent sample of clinically normal older adults from the UCSF Hillblom Aging Network. The size of the reference sample differed slightly by test but was approximately N=250-700, 66±13 years old, 17±2 years of education, 80% white/Caucasian, and 60% female. The reference sample for structural MRI volumes was scanner-specific: Siemens 3T Trio (N=410, mdn [IQR] age=67 [62-74], 56% female), Siemens 3T Prisma Fit (N=299, mdn [IQR] age=66 [59-76], 52% female). Data are presented as mean (standard deviation) or median (lower IQR, upper IQR) depending on whether there was evidence for approximate normality of the z-score distribution.

**Abbrev:** ACC – anterior cingulate cortex, AD – Alzheimer’s disease, bvFTD – behavioral variant frontotemporal dementia, DLPFC – dorsolateral prefrontal cortex, OFC – orbitofrontal cortex, UDS3-EF – Uniform Data Set v3.0 Executive Function composite score