

**On-line Table: MRI intracranial volumes and measures of cognitive function<sup>a</sup>**

Measure MRI Volume	Estimate	SE	P Value Effect Size <sup>b</sup>	Absolute	%
<b>3MSE</b>					
GM, unadjusted	6.06	1.26	$1.5 \times 10^{-6}$	-13.06	-15.4
GM, adjusted	4.87	1.60	$2.3 \times 10^{-3}$	-10.66	-12.6
WM, unadjusted	0.08	1.58	.96	-0.16	-0.2
WM, adjusted	-2.19	1.64	.18	4.47	5.3
WM lesion, unadjusted	$-7.9 \times 10^{-3}$	$2.5 \times 10^{-3}$	$2.0 \times 10^{-3}$	-8.87	-10.5
WM lesion, adjusted	$-4.3 \times 10^{-3}$	$3.0 \times 10^{-3}$	.15	-5.01	-5.9
<b>MoCA</b>					
GM, unadjusted	3.45	0.78	$9.6 \times 10^{-6}$	-1.80	-9.1
GM, adjusted	2.30	1.01	$2.2 \times 10^{-2}$	-1.22	-6.2
WM, unadjusted	-0.05	0.97	.96	0.02	0.1
WM, adjusted	-0.81	1.01	.43	0.38	1.9
WM lesion, unadjusted	$-2.7 \times 10^{-3}$	$1.5 \times 10^{-3}$	.06	-0.74	-3.8
WM lesion, adjusted	$-4.2 \times 10^{-4}$	$1.8 \times 10^{-3}$	.82	-0.12	-0.6
<b>RAVLT</b>					
GM, unadjusted	2.79	0.49	$1.3 \times 10^{-8}$	-2.83	-7.4
GM, adjusted	0.98	0.59	.10	-1.02	-2.7
WM, unadjusted	-0.33	0.60	.58	0.30	0.8
WM, adjusted	-0.57	0.57	.32	0.52	1.4
WM lesion, unadjusted	$-2.1 \times 10^{-3}$	$9.0 \times 10^{-4}$	$2.9 \times 10^{-2}$	-1.08	-2.9
WM lesion, adjusted	$5.3 \times 10^{-4}$	$1.0 \times 10^{-3}$	.61	0.28	0.8
<b>DSC</b>					
GM, unadjusted	4.93	0.73	$1.4 \times 10^{-11}$	-6.16	-12.8
GM, adjusted	2.05	0.84	$1.5 \times 10^{-2}$	-2.66	-5.5
WM, unadjusted	2.58	0.88	$3.5 \times 10^{-3}$	-2.85	-5.9
WM, adjusted	1.27	0.82	.012	-1.42	-3.0
WM lesion, unadjusted	$-8.8 \times 10^{-3}$	$1.3 \times 10^{-3}$	$6.7 \times 10^{-12}$	-5.64	-11.7
WM lesion, adjusted	$-5.0 \times 10^{-3}$	$1.5 \times 10^{-3}$	$6.7 \times 10^{-4}$	-3.31	-6.9
<b>VFA</b>					
GM, unadjusted	1.87	0.63	$3.0 \times 10^{-3}$	-0.79	-5.1
GM, adjusted	0.69	0.90	.44	-0.30	-1.9
WM, unadjusted	0.69	0.75	.36	-0.25	-1.6
WM, adjusted	-0.18	0.88	.84	0.07	0.4
WM lesion, unadjusted	$-3.0 \times 10^{-3}$	$1.2 \times 10^{-3}$	$1.5 \times 10^{-2}$	-0.66	-4.2
WM lesion, adjusted	$-1.8 \times 10^{-3}$	$1.7 \times 10^{-3}$	.29	-0.39	-2.5
<b>Stroop errors</b>					
GM, unadjusted	-10.62	2.98	$3.7 \times 10^{-4}$	1.16	34.2
GM, adjusted	-4.09	4.32	.34	0.41	12.0
WM, unadjusted	2.53	3.96	.52	-0.20	-5.8
WM, adjusted	-0.54	4.23	.90	0.04	1.3
WM lesion, unadjusted	$1.1 \times 10^{-2}$	$8.2 \times 10^{-3}$	.17	0.58	17.1
WM lesion, adjusted	$1.4 \times 10^{-3}$	$9.4 \times 10^{-3}$	.88	0.07	2.1
<b>Stroop interference</b>					
GM, unadjusted	-4.45	0.83	$6.9 \times 10^{-8}$	4.15	13.1
GM, adjusted	-2.36	1.12	$3.5 \times 10^{-2}$	2.14	6.8
WM, unadjusted	-2.28	1.07	$3.3 \times 10^{-2}$	1.75	5.5
WM, adjusted	-1.28	1.13	.26	0.97	3.1
WM lesion, unadjusted	$8.1 \times 10^{-3}$	$1.6 \times 10^{-3}$	$5.5 \times 10^{-7}$	3.85	12.2
WM lesion, adjusted	$6.1 \times 10^{-3}$	$2.2 \times 10^{-3}$	$4.6 \times 10^{-3}$	2.85	9.0

**Note:**—SE indicates standard error; 3MSE, modified MMSE; RAVLT, Rey Auditory Verbal Learning Test.

<sup>a</sup> Adjustment reflects age, sex, body mass index, HbA1c, and level of education.

<sup>b</sup> "Effect Size" is the absolute and percentage difference from the mean cognitive score reported in Table 3 computed for each 1 SD change in the MRI measure.