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Section 1: Tractography-Level Quality Control

Tract-based failure rates for the entire subject sample with images in our study are reported below in *Table 1.1*. Terminal arc lengths were not included in the tract average calculations of FA, AD, and RD for tracts with high noise. Visualizations of excluded portions of the tracts can be seen in *Figure 1.1*.

	Neona	tes (N=662)	1-year	r (N=435)	2-yea	r (N=325)
	% Failures	Cropped (Y/N)	% Failures	Cropped (Y/N)	% Failures	Cropped (Y/N)
ARC-FP (L)	8%		0%		0%	
ARC-FP (R)	20%		0%		0%	
ARC-FT (L)	3%		1%		0%	
ARC-FT (R)	2%		3%		2%	
ARC-TP (L)	38%		1%		0%	
ARC-TP (R)	1%	Y	1%		0%	
CF-M (L)	0%	Y	5%		0%	
CF-M (R)	0%	Y	1%		0%	
CGC (L)	0%		0%		1%	
CGC (R)	0%	Y	0%	Y	0%	Y
CT-M (L)	0%		0%	Y	0%	Y
CT-M (R)	3%		0%		0%	
CT-Par (L)	12%		0%		0%	
CT-Par (R)	0%		0%		0%	
CT-PFC (L)	0%		0%		0%	
CT-PFC (R)	0%	Y	0%		0%	
CT-PM (L)	0%		0%		0%	
CT-PM (R)	0%		0%		0%	
IFOF (L)	0%		1%		0%	
IFOF (R)	0%		0%		0%	
ILF (L)	0%		0%		0%	
ILF (R)	0%		0%		0%	
SLF (L)	0%	Y	1%		0%	
SLF (R)	1%		2%		2%	
UNC (L)	0%		1%		1%	
UNC (R)	7%		1%		0%	
Genu	16%		1%		1%	
Rostrum	1%		1%		0%	
Splenium	1%	Y	0%		0%	

Table 1.1. Quality Control: Rates of Failure and Tract Properties

Figure 1.1. Visualizations of neonatal and pediatric (1 and 2-year) atlas tracts.

Black segments denote those which were excluded. A) ARC-TP-L, (B) Genu (indicated by black arrow, very small area of cropping), (C) Rostrum, (D) IFOF, (E) CF-M-L, (F) CT-Par-L, (G) UNC-R, (H) CF-M-L, (I) CF-M-R. The coloring of the tracts (green to yellow to red) is associated with the value of the arc length (location) along the tract; it is arbitrary (in that the value bears no influence on how the data were measured) but does span a positive-to-negative spectrum where the values invert at the center of the tract.



Section 2: Mediation Analyses

Mediation analyses were conducted as shown below in *Figure 2.1*. The model estimates a, b, and c' and their standard errors (SE) are reported along with Sobel test statistics in Tables 2.1 - 2.3 for FA, AD, and RD respectively.

Figure 2.1. Mediation Model



For this model, the direct relationship: c = 0.41, p < 0.0001



Table 2.1. FA Mediation Model

		Full Mo	del	G	A and FA	.0	FA0 and	ELC2 ((with GA)	So	bel Te	st
Tract	c'	c' SE	fdr pval	а	a SE	fdr pval	b	b SE	fdr pval	Tstat	SE	pval
ARC_FP_L	0.43	0.08	3.1E-07	6.1E-04	8.9E-05	2.8E-10	36.22	49.63	0.77	0.73	0.03	0.47
ARC_FP_R	0.42	0.08	5.4E-07	4.3E-04	1.0E-04	3.7E-05	37.65	48.30	0.77	0.77	0.02	0.44
ARC_FT_L	0.43	0.08	1.1E-07	4.1E-04	7.6E-05	1.5E-07	-36.14	54.48	0.77	-0.66	0.02	0.51
ARC_FT_R	0.42	0.08	2.4E-07	4.9E-04	8.3E-05	1.7E-08	27.04	50.78	0.85	0.53	0.03	0.60
ARC_TP_L	0.48	0.09	3.1E-07	3.5E-04	6.9E-05	9.8E-07	-62.61	85.47	0.77	-0.73	0.03	0.47
ARC_TP_R	0.40	0.07	2.6E-07	3.3E-04	5.8E-05	7.7E-08	69.69	69.93	0.77	0.98	0.02	0.33
CF_M_L	0.43	0.07	1.0E-07	4.1E-04	8.8E-05	4.8E-06	5.42	45.99	0.97	0.12	0.02	0.91
CF_M_R	0.41	0.07	1.6E-07	4.4E-04	8.8E-05	1.1E-06	41.61	44.86	0.77	0.91	0.02	0.36
Cing_L	0.43	0.07	5.0E-08	1.1E-04	8.7E-05	1.9E-01	-3.11	48.26	0.97	-0.06	0.01	0.95
Cing_R	0.46	0.07	4.0E-08	1.9E-04	9.3E-05	3.9E-02	-86.71	45.02	0.77	-1.42	0.01	0.16
CT_M_L	0.43	0.07	1.0E-07	4.2E-04	7.9E-05	3.7E-07	-4.67	52.19	0.97	-0.09	0.02	0.93
CT_M_R	0.40	0.08	3.1E-07	4.8E-04	8.0E-05	1.2E-08	52.47	51.35	0.77	1.01	0.03	0.31
CT_Par_L	0.42	0.07	1.1E-07	4.5E-04	9.2E-05	1.7E-06	18.80	43.59	0.85	0.43	0.02	0.67
CT_Par_R	0.41	0.07	1.5E-07	5.1E-04	9.3E-05	1.5E-07	29.40	42.78	0.77	0.68	0.02	0.50
CT_PFC_L	0.44	0.08	1.1E-07	5.3E-04	8.3E-05	1.5E-09	-21.74	52.70	0.85	-0.41	0.03	0.68
CT_PFC_R	0.42	0.08	2.7E-07	5.4E-04	7.9E-05	2.2E-10	20.10	52.86	0.85	0.38	0.03	0.70
CT_PM_L	0.42	0.07	1.4E-07	4.0E-04	8.3E-05	3.3E-06	23.61	50.17	0.85	0.47	0.02	0.64
CT_PM_R	0.41	0.08	2.4E-07	5.0E-04	8.8E-05	6.5E-08	32.71	46.84	0.77	0.69	0.02	0.49
IFOF_L	0.39	0.08	1.5E-06	7.0E-04	9.5E-05	1.3E-11	54.33	44.81	0.77	1.20	0.03	0.23
IFOF_R	0.39	0.08	1.3E-06	6.9E-04	9.2E-05	5.5E-12	35.87	46.53	0.77	0.77	0.03	0.44
ILF_L	0.39	0.08	6.2E-07	5.9E-04	1.0E-04	1.9E-08	57.85	42.50	0.77	1.33	0.03	0.18
ILF_R	0.40	0.07	3.1E-07	5.5E-04	9.0E-05	1.2E-08	64.24	45.72	0.77	1.37	0.03	0.17
SLF_L	0.44	0.07	8.3E-08	3.8E-04	8.1E-05	5.8E-06	-8.25	50.90	0.97	-0.16	0.02	0.87
SLF_R	0.40	0.08	4.5E-07	2.6E-04	8.5E-05	2.4E-03	72.96	53.10	0.77	1.26	0.02	0.21
UNC_L	0.38	0.08	4.6E-06	6.9E-04	8.7E-05	7.9E-13	57.68	49.52	0.77	1.15	0.03	0.25
UNC_R	0.39	0.08	1.5E-06	7.4E-04	8.8E-05	4.1E-14	35.28	47.71	0.77	0.74	0.04	0.46
Genu	0.43	0.08	1.5E-07	8.3E-04	1.2E-04	2.6E-10	-1.20	34.21	0.97	-0.04	0.03	0.97
Rost	0.45	0.08	8.3E-08	8.6E-04	1.3E-04	1.1E-09	-23.21	31.15	0.77	-0.74	0.03	0.46
Splen	0.39	0.07	2.2E-07	3.3E-04	1.0E-04	1.8E-03	89.37	37.99	0.56	1.89	0.02	0.06

Table 2.2. AD Mediation Model

		Full Mo	odel	G	A and AD	0	AD0 and	ELC2 (w	ith GA)	So	bel Te	st
Tract	c'	c'SE	fdr pval	а	a SE	fdr pval	b	b SE	fdr pval	Tstat	SE	pval
ARC_FP_L	0.43	0.08	3.1E-07	-2.2E-06	3.2E-07	1.7E-10	-1.9E+04	1.3E+04	0.75	1.40	0.03	0.16
ARC_FP_R	0.42	0.08	5.4E-07	-1.7E-06	3.4E-07	7.5E-07	-1.6E+04	1.4E+04	0.75	1.12	0.02	0.26
ARC_FT_L	0.43	0.08	1.1E-07	-2.2E-06	3.3E-07	5.5E-10	-2.4E+04	1.2E+04	0.75	1.88	0.03	0.06
ARC_FT_R	0.42	0.08	2.4E-07	-1.9E-06	3.0E-07	5.5E-10	-1.9E+04	1.4E+04	0.75	1.36	0.03	0.17
ARC_TP_L	0.48	0.09	3.1E-07	-2.3E-06	3.8E-07	1.1E-08	4.0E+03	1.5E+04	0.92	-0.26	0.03	0.79
ARC_TP_R	0.40	0.07	2.6E-07	-2.2E-06	3.1E-07	1.1E-11	-2.0E+04	1.3E+04	0.75	1.55	0.03	0.12
CF_M_L	0.43	0.07	1.0E-07	-1.2E-06	2.0E-07	3.3E-08	-1.2E+04	2.1E+04	0.92	0.56	0.02	0.58
CF_M_R	0.41	0.07	1.6E-07	-1.1E-06	2.0E-07	3.5E-08	-1.0E+04	2.0E+04	0.92	0.49	0.02	0.63
Cing_L	0.43	0.07	5.0E-08	-2.4E-06	3.5E-07	7.0E-11	-2.0E+03	1.2E+04	0.92	0.17	0.03	0.87
Cing_R	0.46	0.07	4.0E-08	-2.3E-06	3.8E-07	9.1E-09	-1.6E+04	1.1E+04	0.75	1.41	0.03	0.16
CT_M_L	0.43	0.07	1.0E-07	-1.5E-06	2.2E-07	1.4E-10	-2.7E+04	1.9E+04	0.75	1.38	0.03	0.17
CT_M_R	0.40	0.08	3.1E-07	-1.5E-06	2.2E-07	9.4E-11	-9.2E+03	1.9E+04	0.92	0.48	0.03	0.63
CT_Par_L	0.42	0.07	1.1E-07	-1.3E-06	2.3E-07	2.1E-08	-1.8E+04	1.8E+04	0.79	0.97	0.02	0.33
CT_Par_R	0.41	0.07	1.5E-07	-1.5E-06	2.3E-07	7.1E-10	-1.4E+04	1.8E+04	0.88	0.79	0.03	0.43
CT_PFC_L	0.44	0.08	1.1E-07	-2.1E-06	2.8E-07	4.8E-13	-4.1E+03	1.5E+04	0.92	0.28	0.03	0.78
CT_PFC_R	0.42	0.08	2.7E-07	-2.2E-06	2.9E-07	1.2E-12	-2.0E+03	1.4E+04	0.92	0.14	0.03	0.88
CT_PM_L	0.42	0.07	1.4E-07	-1.8E-06	2.3E-07	2.5E-12	-2.2E+04	1.8E+04	0.75	1.25	0.03	0.21
CT_PM_R	0.41	0.08	2.4E-07	-1.8E-06	2.3E-07	4.8E-13	-7.8E+03	1.8E+04	0.92	0.45	0.03	0.66
IFOF_L	0.39	0.08	1.5E-06	-2.2E-06	3.2E-07	1.7E-10	3.1E+03	1.2E+04	0.92	-0.26	0.03	0.80
IFOF_R	0.39	0.08	1.3E-06	-2.3E-06	3.2E-07	1.0E-11	-4.2E+03	1.2E+04	0.92	0.34	0.03	0.73
ILF_L	0.39	0.08	6.2E-07	-2.0E-06	3.5E-07	6.6E-08	-4.2E+03	1.1E+04	0.92	0.37	0.02	0.71
ILF_R	0.40	0.07	3.1E-07	-2.0E-06	3.2E-07	3.1E-09	-1.7E+04	1.2E+04	0.75	1.31	0.03	0.19
SLF_L	0.44	0.07	8.3E-08	-1.8E-06	2.9E-07	6.2E-09	-1.6E+04	1.4E+04	0.75	1.12	0.03	0.26
SLF_R	0.40	0.08	4.5E-07	-1.8E-06	2.8E-07	5.5E-10	-1.7E+04	1.7E+04	0.79	0.98	0.03	0.33
UNC_L	0.38	0.08	4.6E-06	-3.0E-06	3.0E-07	6.5E-19	-2.3E+03	1.4E+04	0.92	0.16	0.04	0.87
UNC_R	0.39	0.08	1.5E-06	-2.9E-06	3.0E-07	4.7E-19	-1.1E+04	1.3E+04	0.88	0.81	0.04	0.42
Genu	0.43	0.08	1.5E-07	-2.6E-06	3.1E-07	1.5E-14	-9.4E+03	1.3E+04	0.89	0.74	0.03	0.46
Rost	0.45	0.08	8.3E-08	-3.1E-06	3.2E-07	4.4E-18	-7.1E+03	1.2E+04	0.92	0.58	0.04	0.56
Splen	0.39	0.07	2.2E-07	-1.7E-06	3.0E-07	5.2E-08	7.3E+02	1.3E+04	0.95	-0.06	0.02	0.95

		Full Mo	odel	G	A and RD	0	RD0 and	ELC2 (w	ith GA)	So	bel Te	st
Tract	c'	c'SE	fdr pval	а	a SE	fdr pval	b	b SE	fdr pval	Tstat	SE	pval
ARC_FP_L	0.43	0.08	3.1E-07	-2.8E-06	3.8E-07	1.6E-12	-1.4E+04	1.1E+04	0.70	1.26	0.03	0.21
ARC_FP_R	0.42	0.08	5.4E-07	-2.2E-06	4.0E-07	1.0E-07	-1.4E+04	1.2E+04	0.70	1.10	0.03	0.27
ARC_FT_L	0.43	0.08	1.1E-07	-2.5E-06	3.4E-07	7.2E-12	-1.3E+04	1.2E+04	0.70	1.07	0.03	0.29
ARC_FT_R	0.42	0.08	2.4E-07	-2.4E-06	3.4E-07	7.6E-12	-1.2E+04	1.2E+04	0.70	0.98	0.03	0.33
ARC_TP_L	0.48	0.09	3.1E-07	-2.5E-06	3.7E-07	1.2E-10	8.6E+03	1.6E+04	0.74	-0.54	0.04	0.59
ARC_TP_R	0.40	0.07	2.6E-07	-2.5E-06	3.2E-07	2.5E-13	-1.7E+04	1.2E+04	0.70	1.35	0.03	0.18
CF_M_L	0.43	0.07	1.0E-07	-1.5E-06	2.2E-07	3.3E-11	-9.8E+03	1.9E+04	0.74	0.52	0.03	0.60
CF_M_R	0.41	0.07	1.6E-07	-1.6E-06	2.2E-07	7.1E-12	-1.9E+04	1.9E+04	0.70	0.99	0.03	0.32
Cing_L	0.43	0.07	5.0E-08	-1.9E-06	2.9E-07	3.3E-10	-2.7E+03	1.4E+04	0.95	0.19	0.03	0.85
Cing_R	0.46	0.07	4.0E-08	-2.0E-06	2.9E-07	1.5E-10	-1.6E+03	1.5E+04	0.98	0.11	0.03	0.92
CT_M_L	0.43	0.07	1.0E-07	-1.8E-06	2.4E-07	1.3E-12	-1.4E+04	1.8E+04	0.70	0.81	0.03	0.42
CT_M_R	0.40	0.08	3.1E-07	-2.0E-06	2.5E-07	1.2E-13	-1.7E+04	1.7E+04	0.70	1.01	0.03	0.31
CT_Par_L	0.42	0.07	1.1E-07	-1.7E-06	2.6E-07	1.5E-10	-1.3E+04	1.6E+04	0.70	0.83	0.03	0.41
CT_Par_R	0.41	0.07	1.5E-07	-2.0E-06	2.7E-07	2.7E-12	-1.6E+04	1.5E+04	0.70	1.07	0.03	0.29
CT_PFC_L	0.44	0.08	1.1E-07	-2.8E-06	3.3E-07	1.1E-14	6.4E+02	1.2E+04	0.99	-0.05	0.03	0.96
CT_PFC_R	0.42	0.08	2.7E-07	-2.8E-06	3.4E-07	1.3E-14	-3.8E+03	1.2E+04	0.88	0.31	0.03	0.76
CT_PM_L	0.42	0.07	1.4E-07	-2.1E-06	2.7E-07	2.5E-13	-1.8E+04	1.6E+04	0.70	1.13	0.03	0.26
CT_PM_R	0.41	0.08	2.4E-07	-2.3E-06	2.7E-07	1.1E-14	-1.2E+04	1.5E+04	0.70	0.80	0.03	0.42
IFOF_L	0.39	0.08	1.5E-06	-3.0E-06	3.5E-07	2.1E-15	-6.1E+03	1.2E+04	0.74	0.51	0.04	0.61
IFOF_R	0.39	0.08	1.3E-06	-3.0E-06	3.4E-07	1.2E-15	-7.0E+03	1.2E+04	0.74	0.59	0.04	0.56
ILF_L	0.39	0.08	6.2E-07	-2.7E-06	3.5E-07	3.2E-13	-1.1E+04	1.2E+04	0.70	0.95	0.03	0.34
ILF_R	0.40	0.07	3.1E-07	-2.6E-06	3.2E-07	1.5E-14	-2.3E+04	1.3E+04	0.70	1.75	0.03	0.08
SLF_L	0.44	0.07	8.3E-08	-2.1E-06	3.1E-07	6.8E-11	-8.2E+03	1.3E+04	0.74	0.60	0.03	0.55
SLF_R	0.40	0.08	4.5E-07	-2.0E-06	3.1E-07	1.4E-09	-2.1E+04	1.5E+04	0.70	1.38	0.03	0.17
UNC_L	0.38	0.08	4.6E-06	-3.6E-06	3.5E-07	3.5E-20	-9.4E+03	1.2E+04	0.70	0.78	0.04	0.43
UNC_R	0.39	0.08	1.5E-06	-3.6E-06	3.4E-07	2.1E-21	-1.0E+04	1.2E+04	0.70	0.87	0.04	0.38
Genu	0.43	0.08	1.5E-07	-3.7E-06	4.3E-07	1.3E-15	-4.9E+03	9.5E+03	0.74	0.52	0.04	0.61
Rost	0.45	0.08	8.3E-08	-3.9E-06	4.2E-07	1.5E-17	1.6E+02	9.7E+03	0.99	-0.02	0.04	0.99
Splen	0.39	0.07	2.2E-07	-1.8E-06	3.2E-07	1.3E-08	-2.0E+04	1.3E+04	0.70	1.48	0.02	0.14

Section 3: Preterm vs. Full-term Samples

The sample was split by full-term (\geq 37 weeks gestation) and preterm (< 37 weeks gestation) and results are compared.

Figure 3.1. Unadjusted Correlations between WM at Birth and Cognition at 1 and 2 in Full-term and Preterm Samples Unadjusted (raw) correlations between WM at birth and MSEL scores at ages 1 and 2 are shown for full-term (FT) and preterm (PT) samples. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.



Figure 3.2. Adjusted Correlations between WM at Birth and Cognition at 1 in Full-term and Preterm Samples Adjusted correlations (corrected for gestational age at birth, sex, gestation number, maternal education, age at testing, MSEL test date, and scanner variables) between WM at birth and MSEL scores at ages 1 are shown for full-term (FT) and preterm (PT) samples. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.









Corr

Corr

Rostrum

0.50

0.25 0.00

-0.25

-0.50

Genu Rostrum Splenium 0.50

0.25

0.00

-0.25

-0.50

Figure 3.3. Unadjusted Correlations between WM at Age 1 and Cognition at 1 in Full-term and Preterm Samples Unadjusted (raw) correlations between WM at age 1 and MSEL scores at age 1 are shown for full-term (FT) and preterm (PT) samples. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.



Corr

Rostrum

Splenium

0.50

0.25

0.00

-0.25

-0.50

ELC1

GM1

FM1

EL1

RL1

VR1

ARC-FP (L) ARC-FP (R) ARC-FT (L) ARC-FT (L) ARC-FT (L) ARC-FT (L) ARC-FT (L) CF-M (R) CF-M (R



Figure 3.4. Adjusted Correlations between WM at Age 1 and Cognition at 1 in Full-term and Preterm Samples Adjusted correlations (corrected for gestational age at birth, sex, gestation number, maternal education, age at testing, MSEL test date, and scanner variables) between WM at age 1 and MSEL scores at ages 1 are shown for full-term (FT) and preterm (PT) samples. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.













Table 3.1. Longitudinal Mixed Model Results in the Preterm Sample

Mixed models predicting MSEL scores at age 2 from longitudinal tract-based WM were conducted. Findings which were significant for the full sample are shown below for the preterm-only sample for comparison. Models were corrected for gestational age at birth, sex, gestation number, maternal education, age at testing, MSEL test date, and scanner variables. No results survived FDR correction.

					Preterm				
Tract	MSEL Score	Effect	Estimate ^a	Trend ^b	Std. Error ^c	DF ^d	FDR Pval ^f	N Subs ^g	N Obs ^h
SLF (R)	ELC2	dAD _{2,1}	3.50E+05	Slower Decrease, Higher Score	8.86E+04	9	0.10	23	21
UNC (L)	GM2	dFA _{1,0}	-3.31E+01	Slower Increase, Higher Score	2.97E+01	13	0.94	28	26
ARC-FT (L)	RL2	dRD _{2,1}	-2.95E+04	Faster Decrease, Higher Score	5.39E+04	13	0.88	28	26
ARC-FT (R)	RL2	dRD _{2,1}	4.90E+03	Slower Decrease, Higher Score	5.00E+04	11	0.96	26	24
ARC-TP (R)	RL2	dRD _{2,1}	2.83E+04	Slower Decrease, Higher Score	3.35E+04	13	0.88	28	26
CF-M (L)	RL2	dRD _{2,1}	-3.19E+04	Faster Decrease, Higher Score	2.12E+04	13	0.88	28	26
CF-M (R)	RL2	dRD _{2,1}	-1.18E+05	Faster Decrease, Higher Score	4.43E+04	13	0.57	28	26
CGC (L)	RL2	dRD _{2,1}	-2.36E+04	Faster Decrease, Higher Score	3.54E+04	13	0.88	28	26
CT-M (L)	RL2	dRD _{2,1}	-2.62E+04	Faster Decrease, Higher Score	3.26E+04	13	0.88	28	26
CT-M (R)	RL2	dRD _{2,1}	-1.55E+04	Faster Decrease, Higher Score	3.23E+04	13	0.88	28	26
CT-Par (R)	RL2	dRD _{2,1}	-5.32E+04	Faster Decrease, Higher Score	4.26E+04	13	0.88	28	26
CT-PM (R)	RL2	dRD _{2,1}	-1.22E+04	Faster Decrease, Higher Score	3.01E+04	13	0.88	28	26
IFOF (L)	RL2	dRD _{2,1}	2.31E+04	Slower Decrease, Higher Score	4.25E+04	13	0.88	28	26
ILF (L)	RL2	dRD _{2,1}	1.15E+04	Slower Decrease, Higher Score	5.89E+04	10	0.96	25	23
SLF (L)	RL2	dRD _{2,1}	-3.37E+04	Faster Decrease, Higher Score	3.79E+04	12	0.88	27	25
CT-PFC (L)	RL2	$dRD_{2,1}$	1.13E+04	Slower Decrease, Higher Score	2.51E+04	13	0.88	28	26

Table 3.2. Longitudinal Mixed Model Results in the Full-term Sample

Mixed models predicting MSEL scores at age 2 from longitudinal tract-based WM were conducted. Findings which were significant for the full sample are shown below for the full-term-only sample for comparison. Models were corrected for gestational age at birth, sex, gestation number, maternal education, age at testing, MSEL test date, and scanner variables. No results survived FDR correction.

]	Full-Term				
Tract	MSEL Score	Effect	Estimate ^a	Trend ^b	Std. Error ^c	DF ^d	FDR Pval ^f	N Subs ^g	N Obs ^h
SLF (R)	ELC2	dAD _{2,1}	9.87E+04	Slower Decrease, Higher Score	7.61E+04	22	0.84	36	35
UNC (L)	GM2	dFA _{1,0}	8.87E+00	Faster Increase, Higher Score	3.17E+01	26	1.00	40	39
ARC-FT (L)	RL2	dRD _{2,1}	3.86E+04	Slower Decrease, Higher Score	2.40E+04	26	0.71	30	39
ARC-FT (R)	RL2	dRD _{2,1}	3.71E+04	Slower Decrease, Higher Score	2.57E+04	27	0.71	40	40
ARC-TP (R)	RL2	dRD _{2,1}	3.40E+04	Slower Decrease, Higher Score	2.12E+04	27	0.71	40	40
CF-M (L)	RL2	dRD _{2,1}	-1.12E+04	Faster Decrease, Higher Score	2.19E+04	26	0.99	40	39
CF-M (R)	RL2	dRD _{2,1}	1.56E+03	Slower Decrease, Higher Score	2.52E+04	26	0.99	40	39
CGC (L)	RL2	dRD _{2,1}	4.92E+04	Slower Decrease, Higher Score	2.41E+04	24	0.71	38	37
CT-M (L)	RL2	dRD _{2,1}	8.85E+03	Slower Decrease, Higher Score	2.62E+04	27	0.99	41	40
CT-M (R)	RL2	dRD _{2,1}	-4.72E+03	Faster Decrease, Higher Score	2.49E+04	27	0.99	41	40
CT-Par (R)	RL2	dRD _{2,1}	8.38E+03	Slower Decrease, Higher Score	1.62E+04	27	0.08	41	40
CT-PM (R)	RL2	dRD _{2,1}	-1.36E+03	Faster Decrease, Higher Score	2.36E+04	27	0.99	41	40
IFOF (L)	RL2	dRD _{2,1}	1.79E+04	Slower Decrease, Higher Score	2.10E+04	27	0.99	41	40
ILF (L)	RL2	dRD _{2,1}	2.57E+04	Slower Decrease, Higher Score	1.93E+04	24	0.71	38	37
SLF (L)	RL2	dRD _{2,1}	5.99E+03	Slower Decrease, Higher Score	1.79E+04	24	0.99	38	37
CT-PFC (L)	RL2	dRD _{2,1}	-2.39E+04	Faster Decrease, Higher Score	2.06E+04	26	0.82	40	39

^aModel estimate

^bTrend: higher MSEL scores at age 2 are predicted by slower decreases over time in AD or RD (positive estimates), slower increases in FA (negative estimates), faster decreases in AD or RD, or greater FA at birth (positive estimate).

^cStandard error

^dDegrees of freedom

^fFDR-corrected p-value

^gNumber of unique subjects in the analysis

^hNumber of total subjects in the analysis, treating one twin from each pair as repeated measures

Section 4: Twin versus Singleton Samples

The sample was split into twins and singletons and for unadjusted correlations which are not controlled for gestation number.

Figure 4.1. Unadjusted Correlations between WM at Birth and Cognition at 1 and 2 in Twin and Singleton Samples Unadjusted (raw) correlations between WM at birth and MSEL scores at ages 1 and 2 are shown for twins and singletons. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.



Figure 4.2. Unadjusted Correlations between WM at Age 1 and Cognition at 1 and 2 in Twin and Singleton Samples Unadjusted (raw) correlations between WM at age 1 and MSEL scores at ages 1 and 2 are shown for twins and singletons. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.



Figure 4.3. Unadjusted Correlations between WM at Age 2 and Cognition at 2 in Twin and Singleton Samples Unadjusted (raw) correlations between WM at age 2 and MSEL scores at age 2 are shown for twins and singletons. Correlations are presented in order to compare the direction and magnitude of effect sizes can be visualized; very few results survive FDR correction.

0.50

0.25

0.00













Section 5: Mixed Effects Models

Primary findings were replicated using mixed effects models to account for the relatedness between twin participants, as one twin from each pair is treated as a repeated measure.

Figure 5.1. Mixed Model Findings between WM in Neonates, 1-yr-olds, and 2-yr-olds and Cognition at 1

Mixed effect models corrected for gestational age at birth, sex, gestation number, maternal education, age at testing, MSEL test date, and scanner variables are presented for associations between WM in neonates, 1-yr-olds and 2-yr-olds and MSEL scores at ages 1 and 2. Shaded block represent results which survive FDR correction.



Section 6: Correcting Correlations between WM and Cognition for Age and Sex Only

Table 6.1.a: Comparison between Age-Sex Corrected and Unadjusted Correlations – AD at birth and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 1year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted	1	Age - Sex		Unadjusted		Age - Sex		Unadjusted	1
	AD 0 -ELC	1	AD 0 - ELC	I	AD 0 - GM 1		AD 0 - GMI		AD 0 - FM 1		AD 0 - FMI		AD 0 - EL 1		AD 0 - EL1		AD 0 - RL 1		AD 0 - RL1		AD 0 - VR 1		AD 0 - VR1	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval										
ARC_FP_L	-0.01	0.83	0.00	0.96	-0.11	0.12	-0.13	0.06	-0.01	0.85	-0.14	0.0214+	-0.01	0.88	-0.07	0.27	-0.03	0.64	-0.07	0.25	0.01	0.91	-0.04	0.49
ARC FP R	-0.04	0.56	-0.06	0.40	-0.04	0.54	-0.04	0.50	-0.02	0.73	-0.10	0.13	-0.03	0.80	-0.07	0.29	-0.11	0.13	-0.14	0.0436+	-0.08	0.79	-0.11	0.25
ARC FT L	-0.05	0.49	-0.06	0.40	-0.06	0.30	-0.08	0.18	-0.04	0.51	-0.14	0.0193+	-0.02	0.80	-0.08	0.21	-0.07	0.25	-0.11	0.09	-0.05	0.79	-0.09	0.25
ARC FT R	-0.05	0.49	-0.05	0.40	-0.08	0.23	-0.10	0.11	-0.07	0.42	-0.18	0.0034++	-0.04	0.70	-0.10	0.11	-0.11	0.13	-0.15	0.0187+	-0.03	0.79	-0.09	0.25
ARC TP L	-0.02	0.80	-0.06	0.40	-0.04	0.57	-0.05	0.51	0.03	0.73	-0.08	0.26	0.01	0.94	-0.08	0.26	-0.07	0.36	-0.08	0.24	-0.07	0.79	-0.12	0.25
ARC TP R	-0.06	0.47	-0.06	0.40	-0.06	0.33	-0.08	0.16	-0.05	0.42	-0.17	0.0036++	-0.06	0.53	-0.13	0.06	-0.12	0.09	-0.15	0.0187+	-0.03	0.79	-0.09	0.25
CEML	-0.12	0.12	-0.11	0.24	-0.11	0.12	-0.13	0.06	-0.16	0.0274+	-0.25	<.0001+++	-0.08	0.53	-0.12	0.06	-0.11	0.13	-0.14	0.0326+	-0.05	0.79	-0.10	0.25
CFMR	-0.15	0.09	-0.14	0.17	-0.09	0.19	-0.10	0.11	-0.17	0.0274+	-0.24	<.0001+++	-0.13	0.43	-0.17	0.0397+	-0.17	0.0443+	-0.18	0.0154+	-0.05	0.79	-0.08	0.27
Cing L	-0.15	0.09	-0.15	0.17	-0.14	0.10	-0.14	0.06	-0.12	0.15	-0.19	0.0018++	-0.12	0.43	-0.15	0.0397+	-0.17	0.0443+	-0.17	0.0154+	-0.05	0.79	-0.06	0.40
Cing R	-0.06	0.47	-0.08	0.34	-0.07	0.27	-0.08	0.19	-0.04	0.51	-0.12	0.0404+	-0.06	0.63	-0.10	0.14	-0.12	0.10	-0.13	0.05	-0.01	0.91	-0.03	0.61
CTML	-0.14	0.09	-0.12	0.21	-0.11	0.12	-0.14	0.06	-0.16	0.0274+	-0.27	<.0001+++	-0.07	0.53	-0.13	0.06	-0.14	0.07	-0.17	0.0154+	-0.07	0.79	-0.13	0.25
CTMR	-0.14	0.09	-0.12	0.21	-0.10	0.12	-0.13	0.06	-0.18	0.0274+	-0.28	<.0001+++	-0.10	0.50	-0.16	0.0397+	-0.14	0.07	-0.17	0.0154+	-0.05	0.79	-0.10	0.25
CT Par L	-0.12	0.12	-0.11	0.24	-0.13	0.10	-0.15	0.06	-0.15	0.0452+	-0.24	<.0001+++	-0.07	0.53	-0.12	0.06	-0.14	0.07	-0.17	0.0154+	-0.04	0.79	-0.09	0.25
CT Par R	-0.14	0.09	-0.13	0.21	-0.11	0.12	-0.13	0.06	-0.15	0.0367+	-0.24	<.0001+++	-0.11	0.43	-0.16	0.0397+	-0.15	0.07	-0.16	0.0154+	-0.04	0.79	-0.08	0.27
CT PFC L	-0.07	0.47	-0.07	0.34	-0.12	0.12	-0.13	0.06	-0.07	0.42	-0.18	0.0033++	-0.04	0.70	-0.10	0.12	-0.08	0.21	-0.11	0.09	-0.04	0.79	-0.08	0.27
CT PFC R	-0.06	0.47	-0.06	0.40	-0.12	0.11	-0.13	0.06	-0.06	0.42	-0.17	0.0035++	-0.04	0.66	-0.10	0.12	-0.06	0.29	-0.09	0.14	-0.01	0.91	-0.05	0.47
CTPML	-0.10	0.21	-0.09	0.33	-0.08	0.19	-0.12	0.07	-0.11	0.18	-0.23	0.0001+++	-0.09	0.53	-0.15	0.0397+	-0.10	0.13	-0.14	0.0271+	-0.03	0.79	-0.10	0.25
CTPMR	-0.11	0.20	-0.09	0.31	-0.10	0.13	-0.12	0.06	-0.11	0.18	-0.23	0.0001+++	-0.09	0.53	-0.15	0.0397+	-0.13	0.09	-0.16	0.0172+	-0.04	0.79	-0.09	0.25
IFOF_L	-0.04	0.56	-0.05	0.40	-0.13	0.10	-0.14	0.06	-0.06	0.42	-0.15	0.0096++	-0.07	0.53	-0.12	0.06	-0.08	0.25	-0.10	0.09	0.03	0.79	-0.02	0.77
IFOF R	-0.06	0.47	-0.06	0.40	-0.14	0.10	-0.15	0.06	-0.06	0.42	-0.16	0.0064++	-0.07	0.53	-0.12	0.06	-0.10	0.13	-0.13	0.0436+	0.00	0.99	-0.05	0.47
ILF_L	-0.05	0.49	-0.07	0.34	-0.08	0.22	-0.09	0.16	-0.06	0.42	-0.13	0.0259+	-0.06	0.53	-0.11	0.09	-0.08	0.21	-0.11	0.09	0.01	0.91	-0.04	0.57
ILF R	-0.08	0.38	-0.09	0.31	-0.15	0.10	-0.16	0.06	-0.10	0.24	-0.18	0.0025++	-0.06	0.53	-0.12	0.06	-0.12	0.09	-0.16	0.0172+	-0.05	0.79	-0.10	0.25
SLF L	-0.06	0.47	-0.06	0.40	-0.11	0.12	-0.11	0.10	-0.11	0.19	-0.19	0.0025++	0.01	0.94	-0.04	0.51	-0.07	0.26	-0.09	0.14	-0.06	0.79	-0.09	0.27
SLF_R	-0.09	0.38	-0.10	0.31	-0.06	0.37	-0.05	0.40	-0.07	0.42	-0.17	0.0077++	-0.03	0.79	-0.07	0.26	-0.13	0.09	-0.15	0.0271+	-0.10	0.79	-0.12	0.25
UNC L	-0.07	0.47	-0.08	0.34	-0.11	0.12	-0.09	0.14	-0.05	0.42	-0.16	0.0074++	-0.05	0.65	-0.10	0.12	-0.10	0.13	-0.10	0.11	-0.04	0.79	-0.05	0.47
UNC_R	-0.06	0.47	-0.08	0.34	-0.13	0.10	-0.12	0.07	-0.07	0.42	-0.18	0.0025++	-0.05	0.65	-0.10	0.11	-0.11	0.13	-0.11	0.09	-0.04	0.79	-0.06	0.40
Genu	-0.05	0.49	-0.05	0.40	-0.12	0.12	-0.12	0.06	-0.06	0.42	-0.18	0.0034++	-0.03	0.77	-0.09	0.14	-0.05	0.40	-0.08	0.20	-0.02	0.91	-0.06	0.42
Rost	-0.04	0.52	-0.05	0.40	-0.10	0.12	-0.10	0.11	-0.05	0.43	-0.17	0.0034++	-0.02	0.80	-0.08	0.19	-0.06	0.34	-0.07	0.20	-0.04	0.79	-0.06	0.40
Splen	-0.06	0.47	-0.08	0.34	-0.09	0.16	-0.10	0.11	-0.05	0.42	-0.13	0.0256+	-0.07	0.53	-0.12	0.07	-0.06	0.29	-0.09	0.14	-0.01	0.91	-0.05	0.47

Table 6.1.b: Comparison between Age-Sex Corrected and Unadjusted Correlations – RD at birth and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 1year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted	1	Age - Sex		Unadjusted		Age - Sex		Unadjusted	ſ	Age - Sex		Unadjusted		Age - Sex		Unadjusted	l	Age - Sex		Unadjusted	i
	RD 0 - ELC	1	RD 0 - ELC	1	RD 0 - GM *	1	RD 0 - GMI		RD 0 - FM 1		RD 0 - FMI		RD 0 - EL 1		RD 0 - EL1		RD 0 - RL 1		RD 0 - RL1		RD 0 - VR 1		RD 0 - VR1	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval										
ARC_FP_L	-0.04	0.50	-0.02	0.78	-0.08	0.26	-0.12	0.10	-0.05	0.40	-0.19	0.0013++	-0.03	0.74	-0.09	0.15	-0.05	0.41	-0.09	0.12	-0.01	0.89	-0.08	0.22
ARC_FP_R	-0.08	0.29	-0.09	0.26	-0.02	0.78	-0.03	0.65	-0.06	0.40	-0.14	0.0245+	-0.03	0.74	-0.07	0.28	-0.13	0.14	-0.16	0.0263+	-0.11	0.81	-0.13	0.20
ARC_FT_L	-0.07	0.30	-0.05	0.39	-0.03	0.59	-0.06	0.30	-0.08	0.20	-0.20	0.0006+++	-0.02	0.78	-0.08	0.19	-0.08	0.26	-0.11	0.08	-0.05	0.81	-0.10	0.20
ARC_FT_R	-0.09	0.23	-0.09	0.26	-0.06	0.35	-0.08	0.17	-0.10	0.15	-0.21	0.0003+++	-0.06	0.62	-0.12	0.07	-0.11	0.15	-0.15	0.0263+	-0.05	0.81	-0.10	0.20
ARC_TP_L	-0.05	0.50	-0.08	0.29	-0.07	0.38	-0.07	0.30	0.00	0.99	-0.12	0.07	-0.01	0.92	-0.11	0.15	-0.08	0.30	-0.09	0.17	-0.08	0.81	-0.13	0.20
ARC_TP_R	-0.07	0.29	-0.07	0.29	-0.07	0.26	-0.10	0.11	-0.08	0.20	-0.20	0.0004+++	-0.06	0.61	-0.13	0.06	-0.10	0.16	-0.14	0.0263+	-0.04	0.81	-0.09	0.21
CF_M_L	-0.14	0.10	-0.12	0.22	-0.14	0.18	-0.16	0.0489+	-0.14	0.0457+	-0.25	<.0001+++	-0.12	0.28	-0.17	0.0141+	-0.13	0.14	-0.17	0.0227+	-0.04	0.81	-0.10	0.20
CF_M_R	-0.16	0.10	-0.14	0.22	-0.12	0.22	-0.15	0.06	-0.17	0.0457+	-0.27	<.0001+++	-0.13	0.28	-0.18	0.0141+	-0.14	0.14	-0.17	0.0227+	-0.06	0.81	-0.12	0.20
Cing_L	-0.10	0.21	-0.08	0.26	-0.10	0.22	-0.13	0.10	-0.13	0.07	-0.23	0.0001+++	-0.07	0.61	-0.12	0.07	-0.12	0.14	-0.14	0.0263+	-0.01	0.87	-0.06	0.27
Cing_R	-0.07	0.29	-0.07	0.30	-0.08	0.26	-0.12	0.10	-0.09	0.17	-0.21	0.0005+++	-0.07	0.61	-0.13	0.07	-0.10	0.18	-0.14	0.0386+	0.02	0.87	-0.04	0.48
CT_M_L	-0.13	0.10	-0.11	0.22	-0.11	0.22	-0.14	0.06	-0.15	0.0457+	-0.26	<.0001+++	-0.11	0.28	-0.17	0.0158+	-0.11	0.15	-0.15	0.0263+	-0.05	0.81	-0.11	0.20
CT_M_R	-0.13	0.10	-0.11	0.23	-0.11	0.22	-0.14	0.06	-0.14	0.0457+	-0.26	<.0001+++	-0.10	0.38	-0.16	0.0175+	-0.12	0.14	-0.16	0.0227+	-0.04	0.81	-0.11	0.20
CT_Par_L	-0.13	0.10	-0.11	0.22	-0.13	0.18	-0.16	0.0490+	-0.15	0.0457+	-0.25	<.0001+++	-0.11	0.28	-0.16	0.0170+	-0.12	0.14	-0.16	0.0227+	-0.02	0.87	-0.09	0.21
CT_Par_R	-0.14	0.10	-0.12	0.22	-0.14	0.18	-0.16	0.0489+	-0.14	0.0457+	-0.25	<.0001+++	-0.12	0.28	-0.18	0.0141+	-0.14	0.14	-0.17	0.0227+	-0.04	0.81	-0.10	0.20
CT_PFC_L	-0.07	0.29	-0.06	0.30	-0.08	0.26	-0.10	0.11	-0.08	0.20	-0.20	0.0004+++	-0.03	0.74	-0.10	0.11	-0.07	0.29	-0.10	0.09	-0.04	0.81	-0.09	0.21
CT_PFC_R	-0.05	0.43	-0.05	0.43	-0.08	0.26	-0.10	0.11	-0.07	0.22	-0.19	0.0006+++	-0.02	0.78	-0.09	0.15	-0.05	0.40	-0.08	0.14	-0.02	0.87	-0.07	0.26
CT_PM_L	-0.11	0.18	-0.09	0.25	-0.06	0.34	-0.10	0.11	-0.13	0.07	-0.24	<.0001+++	-0.09	0.45	-0.15	0.0254+	-0.10	0.17	-0.14	0.0263+	-0.04	0.81	-0.11	0.20
CT_PM_R	-0.11	0.18	-0.09	0.25	-0.08	0.26	-0.11	0.11	-0.12	0.08	-0.25	<.0001+++	-0.07	0.61	-0.13	0.05	-0.11	0.15	-0.15	0.0263+	-0.06	0.81	-0.12	0.20
IFOF_L	-0.06	0.30	-0.07	0.29	-0.08	0.26	-0.10	0.11	-0.09	0.16	-0.21	0.0003+++	-0.05	0.62	-0.12	0.07	-0.06	0.29	-0.10	0.09	-0.01	0.87	-0.07	0.24
IFOF_R	-0.08	0.29	-0.08	0.26	-0.10	0.22	-0.12	0.10	-0.10	0.15	-0.21	0.0003+++	-0.05	0.62	-0.12	0.07	-0.08	0.23	-0.12	0.06	-0.02	0.87	-0.08	0.21
ILF_L	-0.07	0.29	-0.08	0.26	-0.06	0.33	-0.08	0.17	-0.11	0.11	-0.21	0.0003+++	-0.05	0.62	-0.11	0.08	-0.07	0.29	-0.10	0.09	-0.02	0.87	-0.08	0.22
ILF_R	-0.09	0.23	-0.09	0.25	-0.10	0.24	-0.12	0.10	-0.15	0.0457+	-0.25	<.0001+++	-0.05	0.62	-0.12	0.07	-0.10	0.17	-0.13	0.0335+	-0.03	0.87	-0.09	0.21
SLF_L	-0.06	0.30	-0.05	0.45	-0.09	0.26	-0.10	0.11	-0.10	0.15	-0.21	0.0003+++	-0.02	0.81	-0.07	0.24	-0.07	0.28	-0.10	0.09	-0.04	0.81	-0.09	0.21
SLF_R	-0.14	0.10	-0.13	0.22	-0.04	0.58	-0.04	0.52	-0.09	0.19	-0.19	0.0017++	-0.06	0.62	-0.10	0.13	-0.16	0.14	-0.18	0.0227+	-0.13	0.81	-0.14	0.20
UNC_L	-0.09	0.27	-0.09	0.25	-0.07	0.33	-0.07	0.26	-0.09	0.16	-0.20	0.0004+++	-0.04	0.71	-0.10	0.11	-0.09	0.21	-0.10	0.09	-0.06	0.81	-0.08	0.21
UNC_R	-0.07	0.29	-0.08	0.26	-0.10	0.22	-0.10	0.11	-0.09	0.16	-0.21	0.0003+++	-0.04	0.72	-0.10	0.11	-0.09	0.21	-0.10	0.09	-0.05	0.81	-0.08	0.21
Genu	-0.08	0.29	-0.08	0.26	-0.09	0.24	-0.10	0.11	-0.12	0.09	-0.23	0.0001+++	-0.05	0.62	-0.11	0.08	-0.08	0.26	-0.10	0.09	-0.04	0.81	-0.08	0.21
Rost	-0.07	0.29	-0.08	0.26	-0.10	0.22	-0.11	0.11	-0.10	0.14	-0.22	0.0002+++	-0.03	0.74	-0.09	0.13	-0.07	0.29	-0.09	0.13	-0.05	0.81	-0.09	0.21
Splen	-0.11	0.18	-0.09	0.25	-0.09	0.26	-0.12	0.10	-0.16	0.0457+	-0.25	<.0001+++	-0.13	0.28	-0.18	0.0141+	-0.06	0.35	-0.11	0.09	0.00	0.96	-0.07	0.22

Table 6.1.c: Comparison between Age-Sex Corrected and Unadjusted Correlations – FA at birth and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 1year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted	
	FA 0 - ELC 4	1	FA 0 - ELC	1	FA 0 - GM 1		FA 0 - GM1		FA 0 - FM 1		FA 0 - FMM		FA 0 - EL 1		FA 0 - EL1		FA 0 - RL 1		FA 0 - RL1		FA 0 - VR1		FA 0 - VR1	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval
ARC FP L	0.10	0.26	0.06	0.41	0.01	1.00	0.06	0.73	0.11	0.14	0.23	0.0004+++	0.04	0.97	0.10	0.22	0.09	0.63	0.13	0.16	0.08	0.84	0.13	0.21
ARC_FP_R	0.14	0.25	0.12	0.41	0.01	1.00	0.02	0.89	0.10	0.16	0.17	0.0067++	0.02	0.97	0.05	0.49	0.14	0.46	0.16	0.16	0.13	0.63	0.15	0.21
ARC FT L	0.09	0.26	0.05	0.46	-0.03	1.00	0.01	0.89	0.12	0.14	0.23	0.0004+++	0.01	0.97	0.05	0.44	0.08	0.63	0.11	0.19	0.05	0.84	0.10	0.21
ARC FT R	0.14	0.25	0.11	0.41	0.02	1.00	0.04	0.74	0.12	0.14	0.22	0.0004+++	0.06	0.82	0.11	0.19	0.10	0.63	0.12	0.17	0.08	0.84	0.11	0.21
ARC_TP_L	0.09	0.32	0.11	0.41	0.13	0.85	0.14	0.31	0.09	0.25	0.19	0.0066++	0.00	1.00	0.08	0.31	0.06	0.64	0.08	0.28	0.05	0.84	0.11	0.21
ARC TP R	0.09	0.26	0.08	0.41	0.06	1.00	0.09	0.41	0.11	0.14	0.21	0.0005+++	0.05	0.94	0.10	0.19	0.06	0.64	0.09	0.22	0.04	0.84	0.08	0.21
CF_M_L	0.08	0.30	0.07	0.41	0.09	0.85	0.13	0.26	0.06	0.31	0.15	0.0079++	0.10	0.69	0.15	0.08	0.08	0.63	0.13	0.16	0.01	1.00	0.07	0.28
CF_M_R	0.10	0.26	0.08	0.41	0.09	0.85	0.12	0.26	0.10	0.14	0.20	0.0007+++	0.08	0.81	0.13	0.11	0.05	0.64	0.10	0.20	0.04	0.84	0.10	0.21
Cing_L	-0.04	0.54	-0.07	0.41	-0.04	1.00	0.01	0.89	0.05	0.35	0.12	0.0381+	-0.05	0.94	-0.01	0.81	-0.05	0.64	0.00	0.98	-0.04	0.84	0.03	0.63
Cing_R	0.04	0.54	0.00	0.97	0.05	1.00	0.10	0.41	0.10	0.16	0.18	0.0023++	0.04	0.97	0.08	0.27	-0.02	0.76	0.04	0.56	-0.04	0.84	0.03	0.61
CT_M_L	0.08	0.32	0.06	0.41	0.06	1.00	0.09	0.41	0.09	0.16	0.18	0.0015++	0.10	0.69	0.15	0.08	0.04	0.70	0.08	0.22	0.00	1.00	0.06	0.36
CT_M_R	0.06	0.34	0.05	0.46	0.04	1.00	0.09	0.41	0.06	0.31	0.17	0.0023++	0.03	0.97	0.09	0.22	0.03	0.74	0.08	0.22	0.02	0.92	0.09	0.21
CT_Par_L	0.09	0.26	0.08	0.41	0.06	1.00	0.10	0.41	0.11	0.14	0.20	0.0006+++	0.10	0.69	0.15	0.08	0.07	0.64	0.11	0.19	0.00	1.00	0.06	0.36
CT_Par_R	0.10	0.26	0.08	0.41	0.10	0.85	0.14	0.26	0.10	0.16	0.20	0.0007+++	0.07	0.81	0.13	0.11	0.08	0.63	0.13	0.16	0.02	0.92	0.08	0.21
CT_PFC_L	0.07	0.33	0.06	0.41	0.00	1.00	0.04	0.74	0.10	0.15	0.21	0.0005+++	0.04	0.97	0.10	0.19	0.06	0.64	0.10	0.20	0.03	0.90	0.09	0.21
CT_PFC_R	0.03	0.54	0.03	0.63	-0.03	1.00	0.01	0.89	0.07	0.24	0.19	0.0013++	-0.02	0.97	0.05	0.40	0.03	0.71	0.08	0.22	0.02	0.92	0.08	0.21
CT_PM_L	0.08	0.32	0.07	0.41	0.02	1.00	0.05	0.74	0.11	0.14	0.19	0.0010+++	0.07	0.81	0.12	0.14	0.07	0.64	0.10	0.19	0.03	0.90	0.07	0.25
CT_PM_R	0.06	0.33	0.06	0.41	0.00	1.00	0.04	0.74	0.09	0.16	0.19	0.0010++	0.02	0.97	0.08	0.25	0.04	0.71	0.08	0.22	0.05	0.84	0.10	0.21
IFOF_L	0.07	0.33	0.06	0.41	-0.03	1.00	0.01	0.89	0.10	0.15	0.21	0.0005+++	-0.01	0.97	0.06	0.39	0.03	0.74	0_07	0.26	0.06	0.84	0.11	0.21
IFOF_R	0.07	0.33	0.06	0.41	0.00	1.00	0.04	0.74	0.11	0.14	0.22	0.0004+++	0.00	0.99	0.07	0.29	0.04	0.71	0.08	0.22	0.05	0.84	0.10	0.21
ILF_L	0.05	0.43	0.04	0.56	0.00	1.00	0.03	0.78	0.10	0.14	0.21	0.0005+++	-0.02	0.97	0.04	0.49	0.01	0.84	0.05	0.41	0.04	0.84	0.09	0.21
ILF_R	0.06	0.34	0.06	0.41	-0.01	1.00	0.02	0.89	0.13	0.14	0.22	0.0004+++	0.01	0.97	0.06	0.38	0.02	0.76	0.05	0.38	0.00	1.00	0.05	0.45
SLF_L	0.04	0.54	0.00	0.97	0.01	1.00	0.05	0.74	0.06	0.31	0.17	0.0030++	0.03	0.97	0.09	0.25	0.03	0.71	0.08	0.22	-0.01	0.95	0.06	0.33
SLF_R	0.15	0.25	0.13	0.41	0.01	1.00	0.02	0.89	0.09	0.20	0.15	0.0101+	0.07	0.81	0.09	0.25	0.13	0.46	0.14	0.16	0.12	0.63	0.14	0.21
UNC_L	0.10	0.26	0.10	0.41	-0.01	1.00	0.01	0.89	0.13	0.14	0.22	0.0004+++	0.02	0.97	0.08	0.25	0.06	0.64	0.09	0.22	0.07	0.84	0.10	0.21
UNC_R	0.07	0.33	0.07	0.41	0.02	1.00	0.04	0.74	0.09	0.16	0.20	0.0007+++	0.01	0.97	0.07	0.29	0.03	0.71	0.07	0.28	0.05	0.84	0.08	0.21
Genu	0.10	0.26	0.09	0.41	0.04	1.00	0.07	0.59	0.15	0.14	0.24	0.0003+++	0.05	0.94	0.10	0.19	0.08	0.63	0.11	0.19	0.06	0.84	0.10	0.21
Rost	0.09	0.26	0.09	0.41	0.05	1.00	0.07	0.59	0.12	0.14	0.20	0.0006+++	0.03	0.97	0.08	0.26	0.06	0.64	0.08	0.22	0.06	0.84	0.09	0.21
Splen	0.09	0.26	0.06	0.41	0.02	1.00	0.07	0.59	0.17	0.09	0.25	0.0002+++	0.09	0.69	0.14	0.08	0.01	0.84	0.07	0.26	0.02	0.92	0.09	0.21

Table 6.2.a: Comparison between Age-Sex Corrected and Unadjusted Correlations – AD at birth and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 2year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted	[Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted		Age - Sex		Unadjusted	4
	AD0 -ELC:	2	AD0-ELC	2	AD 0 - GM 3	2	AD 0 - GM2		AD 0 - FM 2		AD 0 - FM2		AD 0 - EL 2	!	AD 0 - EL2		AD 0 - RL 2		AD 0 - RL2		AD0-VR2		AD0-VR2	
Tract	Pearson's r	fdr Pval																						
ARC_FP_L	-0.08	0.94	-0.21	0.0028++	-0.13	0.21	-0.14	0.19	-0.05	0.71	-0.17	0.0136+	-0.04	0.93	-0.16	0.0221+	-0.03	1.00	-0.14	0.10	-0.09	0.96	-0.17	0.15
ARC_FP_R	-0.05	0.94	-0.19	0.0090++	-0.08	0.28	-0.08	0.27	0.01	0.93	-0.09	0.19	-0.07	0.93	-0.19	0.0186+	-0.02	1.00	-0.12	0.15	-0.05	0.96	-0.13	0.16
ARC_FT_L	-0.10	0.94	-0.23	0.0028++	-0.09	0.23	-0.08	0.23	-0.07	0.71	-0.19	0.0071++	-0.09	0.93	-0.20	0.0152+	-0.07	1.00	-0.17	0.10	-0.06	0.96	-0.13	0.15
ARC_FT_R	-0.06	0.94	-0.22	0.0028++	-0.15	0.21	-0.13	0.19	-0.03	0.77	-0.16	0.0161+	-0.02	0.93	-0.16	0.0215+	-0.05	1.00	-0.17	0.10	-0.06	0.96	-0.15	0.15
ARC_TP_L	0.03	0.94	-0.12	0.11	-0.10	0.24	-0.12	0.19	0.05	0.74	-0.07	0.38	0.03	0.93	-0.11	0.16	0.00	1.00	-0.10	0.24	0.05	0.96	-0.01	0.85
ARC_TP_R	-0.08	0.94	-0.21	0.0028++	-0.08	0.25	-0.08	0.25	-0.03	0.77	-0.15	0.0207+	-0.06	0.93	-0.18	0.0174+	-0.06	1.00	-0.16	0.10	-0.09	0.96	-0.16	0.15
CF_M_L	-0.04	0.94	-0.15	0.0195+	-0.06	0.39	-0.06	0.36	-0.07	0.71	-0.16	0.0136+	-0.01	0.93	-0.11	0.07	0.04	1.00	-0.06	0.33	-0.01	0.96	-0.07	0.34
CF_M_R	-0.03	0.94	-0.13	0.0366+	-0.05	0.43	-0.06	0.37	-0.06	0.71	-0.15	0.0173+	-0.02	0.93	-0.12	0.05	0.06	1.00	-0.04	0.54	-0.01	0.96	-0.07	0.34
Cing_L	-0.01	0.96	-0.16	0.0149+	-0.11	0.21	0.11	0.19	-0.03	0.75	-0.15	0.0173+	-0.04	0.93	-0.17	0.0207+	0.04	1.00	-0.09	0.21	0.03	0.96	-0.06	0.37
Cing_R	-0.10	0.94	-0.20	0.0046++	-0.09	0.23	-0.10	0.19	-0.10	0.71	-0.20	0.0071++	-0.04	0.93	-0.16	0.0233+	0.00	1.00	-0.11	0.16	-0.09	0.96	-0.15	0.15
CT_M_L	-0.08	0.94	-0.21	0.0028++	-0.10	0.21	-0.10	0.19	-0.09	0.71	-0.20	0.0071++	-0.05	0.93	-0.18	0.0174+	-0.01	1.00	-0.13	0.10	-0.05	0.96	-0.12	0.16
CT_M_R	-0.03	0.94	-0.16	0.0129+	-0.07	0.31	-0.07	0.27	-0.05	0.71	-0.17	0.0136+	-0.01	0.93	-0.13	0.0413+	0.04	1.00	-0.08	0.24	0.00	0.97	-0.08	0.30
CT_Par_L	-0.06	0.94	-0.17	0.0110+	-0.10	0.23	-0.10	0.19	-0.07	0.71	-0.16	0.0136+	-0.06	0.93	-0.16	0.0221+	0.00	1.00	-0.09	0.21	-0.02	0.96	-0.08	0.30
CT_Par_R	-0.04	0.94	-0.17	0.0110+	-0.11	0.21	-0.11	0.19	-0.05	0.71	-0.15	0.0173+	-0.05	0.93	-0.15	0.0221+	0.03	1.00	-0.08	0.25	-0.02	0.96	-0.09	0.23
CT_PFC_L	-0.02	0.96	-0.16	0.0122+	-0.12	0.21	-0.13	0.19	-0.04	0.74	-0.17	0.0136+	0.01	0.93	-0.13	0.0433+	0.00	1.00	-0.12	0.11	-0.01	0.96	-0.10	0.22
CT_PFC_R	-0.01	0.96	-0.15	0.0217+	-0.09	0.23	-0.09	0.20	-0.07	0.71	-0.19	0.0071++	0.02	0.93	-0.12	0.07	0.02	1.00	-0.10	0.19	0.01	0.96	-0.08	0.31
CT_PM_L	-0.07	0.94	-0.20	0.0028++	-0.11	0.21	-0.11	0.19	-0.07	0.71	-0.19	0.0071++	-0.06	0.93	-0.19	0.0152+	0.00	1.00	-0.12	0.12	-0.04	0.96	-0.12	0.16
CT_PM_R	-0.02	0.94	-0.16	0.0129+	-0.08	0.24	-0.08	0.23	-0.07	0.71	-0.19	0.0071++	-0.04	0.93	-0.16	0.0219+	0.06	1.00	-0.06	0.33	0.02	0.96	-0.06	0.37
IFOF_L	0.03	0.94	-0.12	0.06	-0.12	0.21	-0.12	0.19	-0.04	0.74	-0.16	0.0136+	0.02	0.93	-0.11	0.07	0.05	1.00	-0.07	0.31	0.04	0.96	-0.06	0.37
IFOF_R	-0.01	0.96	-0.16	0.0149+	-0.13	0.21	-0.13	0.19	-0.04	0.74	-0.17	0.0136+	-0.02	0.93	-0.15	0.0221+	0.02	1.00	-0.10	0.16	0.02	0.96	-0.08	0.30
ILF_L	0.00	0.99	-0.13	0.0354+	-0.09	0.23	-0.09	0.21	0.00	0.98	-0.12	0.06	-0.02	0.93	-0.13	0.0455+	0.02	1.00	-0.08	0.25	0.02	0.96	-0.07	0.34
ILF_R	-0.06	0.94	-0.21	0.0028++	-0.15	0.21	-0.14	0.19	-0.02	0.84	-0.15	0.0173+	-0.06	0.93	-0.19	0.0152+	-0.03	1.00	-0.15	0.10	-0.05	0.96	-0.13	0.15
SLF_L	-0.07	0.94	-0.19	0.0061++	-0.08	0.25	-0.08	0.23	-0.05	0.73	-0.15	0.0173+	-0.07	0.93	-0.19	0.0154+	-0.02	1.00	-0.12	0.12	-0.03	0.96	-0.10	0.21
SLF_R	-0.06	0.94	-0.19	0.0076++	-0.11	0.21	-0.11	0.19	-0.06	0.71	-0.18	0.0136+	-0.04	0.93	-0.18	0.0186+	-0.03	1.00	-0.15	0.10	-0.04	0.96	-0.11	0.19
UNC_L	-0.01	0.96	-0.19	0.0051++	-0.12	0.21	-0.12	0.19	-0.06	0.71	-0.21	0.0069++	0.01	0.93	-0.15	0.0221+	0.02	1.00	-0.13	0.10	0.01	0.96	-0.10	0.22
UNC_R	-0.05	0.94	-0.22	0.0028++	-0.13	0.21	-0.13	0.19	-0.08	0.71	-0.22	0.0069++	-0.04	0.93	-0.19	0.0152+	0.00	1.00	-0.14	0.10	-0.01	0.96	-0.11	0.17
Genu	-0.05	0.94	-0.19	0.0046++	-0.10	0.23	-0.10	0.19	-0.08	0.71	-0.21	0.0069++	0.01	0.93	-0.13	0.0430+	-0.01	1.00	-0.13	0.10	-0.03	0.96	-0.11	0.17
Rost	-0.04	0.94	-0.20	0.0028++	-0.09	0.23	-0.09	0.21	-0.06	0.71	-0.20	0.0071++	0.01	0.93	-0.14	0.0329+	0.00	1.00	-0.14	0.10	-0.03	0.96	-0.12	0.16
Splen	0.02	0.94	-0.09	0.13	-0.11	0.21	-0.11	0.19	0.00	0.98	-0.10	0.11	0.01	0.93	-0.08	0.17	0.05	1.00	-0.04	0.54	0.01	0.96	-0.06	0.37

Table 6.2.b: Comparison between Age-Sex Corrected and Unadjusted Correlations – RD at birth and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 2year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted		Age - Sex		Unadjusted	i
	RD0-ELC	2	RD 0 - ELC	2	RD 0 - GM 2	2	RD 0 - GM2		RD 0 - FM 2		RD 0 - FM2		RD 0 - EL 2	!	RD 0 - EL2		RD 0 - RL 2		RD 0 - RL2		RD0-VR2		RD 0 - VR2	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval
ARC_FP_L	-0.07	0.75	-0.22	0.0025++	-0.15	0.0493+	-0.15	0.0444+	-0.03	0.73	-0.16	0.0157+	-0.02	0.94	-0.16	0.0210+	-0.05	0.92	-0.17	0.0245+	-0.09	0.81	-0.18	0.07
ARC_FP_R	-0.07	0.75	-0.18	0.0079++	-0.10	0.15	-0.10	0.15	0.00	0.98	-0.09	0.19	-0.06	0.94	-0.17	0.0210+	-0.06	0.92	-0.15	0.0401+	-0.07	0.81	-0.13	0.08
ARC_FT_L	-0.05	0.75	-0.19	0.0029++	-0.12	0.07	-0.11	0.08	-0.04	0.73	-0.16	0.0110+	-0.02	0.94	-0.15	0.0233+	-0.05	0.92	-0.16	0.0245+	-0.04	0.81	-0.12	0.08
ARC_FT_R	-0.06	0.75	-0.20	0.0029++	-0.12	0.07	-0.11	0.08	-0.03	0.73	-0.15	0.0157+	-0.01	0.94	-0.15	0.0250+	-0.06	0.92	-0.17	0.0245+	-0.06	0.81	-0.14	0.08
ARC_TP_L	0.05	0.78	-0.13	0.08	-0.11	0.15	-0.14	0.08	0.05	0.73	-0.09	0.25	0.05	0.94	-0.12	0.12	0.02	0.92	-0.11	0.16	0.05	0.81	-0.03	0.71
ARC_TP_R	-0.08	0.75	-0.22	0.0025++	-0.09	0.15	-0.09	0.13	-0.04	0.73	-0.17	0.0091++	-0.04	0.94	-0.17	0.0210+	-0.06	0.92	-0.17	0.0245+	-0.08	0.81	-0.15	0.08
CF_M_L	-0.04	0.78	-0.17	0.0073++	-0.14	0.0493+	-0.14	0.0444+	-0.02	0.78	-0.15	0.0165+	-0.01	0.94	-0.14	0.0251+	-0.02	0.92	-0.14	0.0332+	-0.03	0.90	-0.11	0.11
CF_M_R	-0.07	0.75	-0.20	0.0029++	-0.13	0.06	-0.14	0.0467+	-0.05	0.73	-0.18	0.0078++	-0.02	0.94	-0.16	0.0210+	-0.04	0.92	-0.16	0.0245+	-0.05	0.81	-0.13	0.08
Cing_L	-0.02	0.86	-0.16	0.0130+	-0.14	0.05	-0.14	0.0444+	-0.05	0.73	-0.17	0.0091++	0.00	0.94	-0.15	0.0251+	0.02	0.92	-0.11	0.08	-0.01	0.96	-0.09	0.15
Cing_R	-0.02	0.86	-0.14	0.0286+	-0.11	0.10	-0.13	0.06	-0.03	0.73	-0.16	0.0157+	0.03	0.94	-0.12	0.07	0.03	0.92	-0.09	0.15	-0.04	0.81	-0.11	0.10
CT_M_L	-0.05	0.75	-0.19	0.0029++	-0.15	0.0493+	-0.15	0.0444+	-0.04	0.73	-0.17	0.0078++	-0.02	0.94	-0.16	0.0210+	-0.03	0.92	-0.15	0.0266+	-0.04	0.81	-0.13	0.08
CT_M_R	-0.06	0.75	-0.21	0.0025++	-0.15	0.0493+	-0.15	0.0444+	-0.06	0.73	-0.19	0.0046++	-0.01	0.94	-0.16	0.0210+	-0.03	0.92	-0.15	0.0262+	-0.05	0.81	-0.14	0.08
CT_Par_L	-0.05	0.75	-0.18	0.0042++	-0.14	0.0493+	-0.15	0.0444+	-0.05	0.73	-0.17	0.0078++	-0.02	0.94	-0.15	0.0214+	-0.03	0.92	-0.14	0.0319+	-0.05	0.81	-0.13	0.08
CT_Par_R	-0.07	0.75	-0.20	0.0028++	-0.17	0.0493+	-0.17	0.0444+	-0.07	0.73	-0.19	0.0046++	-0.01	0.94	-0.16	0.0210+	-0.03	0.92	-0.15	0.0262+	-0.07	0.81	-0.15	0.08
CT_PFC_L	0.01	0.94	-0.15	0.0130+	-0.13	0.06	-0.13	0.05	-0.03	0.73	-0.18	0.0078++	0.05	0.94	-0.12	0.06	0.01	0.93	-0.12	0.05	0.01	0.96	-0.09	0.14
CT_PFC_R	-0.02	0.86	-0.17	0.0071++	-0.12	0.07	-0.13	0.06	-0.06	0.73	-0.20	0.0044++	0.03	0.94	-0.13	0.0416+	0.00	0.96	-0.13	0.0443+	0.00	0.96	-0.10	0.13
CT_PM_L	-0.07	0.75	-0.21	0.0025++	-0.12	0.07	-0.12	0.06	-0.04	0.73	-0.17	0.0078++	-0.03	0.94	-0.18	0.0210+	-0.05	0.92	-0.16	0.0245+	-0.06	0.81	-0.14	0.08
CT_PM_R	-0.05	0.75	-0.20	0.0029++	-0.15	0.0493+	-0.14	0.0444+	-0.04	0.73	-0.19	0.0066++	-0.01	0.94	-0.17	0.0210+	-0.02	0.92	-0.15	0.0262+	-0.03	0.85	-0.13	0.08
IFOF_L	-0.02	0.85	-0.19	0.0031++	-0.14	0.0493+	-0.14	0.0444+	-0.05	0.73	-0.20	0.0044++	0.01	0.94	-0.15	0.0210+	-0.01	0.93	-0.15	0.0304+	-0.02	0.90	-0.12	0.08
IFOF_R	-0.02	0.85	-0.19	0.0029++	-0.14	0.0493+	-0.14	0.0444+	-0.05	0.73	-0.21	0.0040++	0.01	0.94	-0.16	0.0210+	-0.02	0.92	-0.16	0.0245+	-0.02	0.90	-0.12	0.08
ILF_L	-0.05	0.75	-0.20	0.0029++	-0.13	0.06	-0.13	0.05	-0.04	0.73	-0.18	0.0078++	-0.01	0.94	-0.15	0.0210+	-0.05	0.92	-0.17	0.0245+	-0.05	0.81	-0.14	0.08
ILF_R	-0.10	0.75	-0.25	0.0009+++	-0.14	0.0493+	-0.14	0.0444+	-0.06	0.73	-0.21	0.0040++	-0.05	0.94	-0.20	0.0122+	-0.09	0.92	-0.22	0.0124+	-0.10	0.81	-0.18	0.07
SLF_L	-0.04	0.78	-0.17	0.0088++	-0.14	0.0493+	-0.14	0.0444+	-0.02	0.75	-0.14	0.0285+	-0.03	0.94	-0.16	0.0210+	-0.02	0.92	-0.13	0.0446+	-0.02	0.90	-0.10	0.14
SLF_R	-0.10	0.75	-0.21	0.0029++	-0.16	0.0493+	-0.16	0.0444+	-0.10	0.73	-0.19	0.0078++	-0.08	0.94	-0.20	0.0210+	-0.05	0.92	-0.15	0.0321+	-0.08	0.81	-0.13	0.08
UNC_L	-0.05	0.75	-0.22	0.0025++	-0.15	0.0493+	-0.14	0.0444+	-0.07	0.73	-0.22	0.0040++	0.01	0.94	-0.16	0.0210+	-0.02	0.92	-0.17	0.0245+	-0.04	0.81	-0.15	0.08
UNC_R	-0.05	0.75	-0.23	0.0025++	-0.15	0.0493+	-0.14	0.0444+	-0.07	0.73	-0.23	0.0040++	-0.01	0.94	-0.18	0.0210+	-0.02	0.92	-0.17	0.0245+	-0.04	0.81	-0.14	0.08
Genu	-0.03	0.79	-0.19	0.0030++	-0.12	0.07	-0.12	0.06	-0.08	0.73	-0.21	0.0040++	0.03	0.94	-0.13	0.0416+	-0.01	0.94	-0.14	0.0332+	-0.02	0.90	-0.11	0.09
Rost	0.00	0.99	-0.17	0.0066++	-0.14	0.0493+	-0.14	0.0444+	-0.06	0.73	-0.20	0.0044++	0.05	0.94	-0.12	0.06	0.02	0.92	-0.12	0.05	0.01	0.96	-0.09	0.14
Splen	-0.09	0.75	-0.21	0.0025++	-0.12	0.07	-0.12	0.06	-0.05	0.73	-0.17	0.0078++	-0.11	0.94	-0.22	0.0085++	-0.07	0.92	-0.17	0.0245+	-0.05	0.81	-0.13	0.08

Table 6.2.c: Comparison between Age-Sex Corrected and Unadjusted Correlations –FA at birth and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for gestational age at birth and age at MSEL 2year testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted	1	Age - Sex		Unadjusted		Age - Sex		Unadjusted	ī												
	FA 0 - ELC	2	FA 0 - ELC	2	FA 0 - GM 2	2	FA 0 - GM2		FA 0 - FM 2		FA 0 - FM2		FA 0 - EL 2		FA 0 - EL2		FA 0 - RL 2		FA 0 - RL2		FA 0 - VR 2		FA 0 - VR2	
Tract	Pearson's r	fdr Pval																						
ARC_FP_L	0.05	0.75	0.19	0.0078++	0.14	0.05	0.14	0.0497+	0.01	0.99	0.12	0.08	0.00	0.98	0.14	0.12	0.06	0.55	0.18	0.0138+	0.06	0.64	0.14	0.06
ARC FP R	0.07	0.75	0.13	0.07	0.11	0.15	0.10	0.16	0.03	0.99	0.08	0.29	0.05	0.98	0.11	0.14	0.07	0.55	0.12	0.10	0.07	0.60	0.10	0.22
ARC_FT_L	-0.04	0.78	0.07	0.25	0.13	0.06	0.13	0.06	-0.03	0.99	0.07	0.32	-0.08	0.98	0.03	0.69	-0.01	0.95	0.08	0.21	0.00	0.99	0.06	0.41
ARC_FT_R	0.05	0.75	0.14	0.0395+	0.09	0.20	0.09	0.17	0.00	0.99	0.09	0.19	0.02	0.98	0.11	0.13	0.06	0.55	0.14	0.0397+	0.06	0.60	0.11	0.13
ARC_TP_L	-0.06	0.75	0.09	0.25	0.03	0.66	0.07	0.34	-0.04	0.99	0.07	0.39	-0.09	0.98	0.07	0.43	-0.08	0.55	0.04	0.58	0.00	0.99	0.06	0.47
ARC_TP_R	0.07	0.75	0.18	0.0101+	0.13	0.06	0.14	0.0461+	0.03	0.99	0.13	0.06	0.02	0.98	0.13	0.12	0.08	0.55	0.17	0.0138+	0.08	0.60	0.14	0.06
CF_M_L	0.01	1.00	0.11	0.09	0.15	0.0466+	0.16	0.0350+	-0.04	0.99	0.07	0.29	0.01	0.98	0.11	0.12	0.07	0.55	0.15	0.0287+	0.02	0.92	0.09	0.22
CF_M_R	0.07	0.75	0.17	0.0131+	0.15	0.0466+	0.16	0.0350+	0.01	0.99	0.12	0.08	0.01	0.98	0.13	0.12	0.11	0.55	0.20	0.0070++	0.06	0.60	0.13	0.07
Cing_L	0.00	1.00	0.03	0.65	0.08	0.21	0.09	0.17	0.02	0.99	0.05	0.41	-0.05	0.98	-0.01	0.89	0.02	0.79	0.05	0.47	0.04	0.71	0.06	0.37
Cing_R	-0.11	0.64	-0.06	0.36	0.06	0.36	0.07	0.27	-0.10	0.99	-0.05	0.48	-0.10	0.98	-0.04	0.60	-0.05	0.60	0.00	0.97	-0.05	0.64	-0.02	0.75
CT_M_L	0.00	1.00	0.11	0.09	0.14	0.0466+	0.15	0.0350+	-0.04	0.99	0.08	0.28	-0.01	0.98	0.11	0.13	0.05	0.60	0.14	0.0421+	0.02	0.90	0.09	0.21
CT_M_R	0.06	0.75	0.19	0.0078++	0.20	0.0441+	0.20	0.0350+	0.02	0.99	0.14	0.05	0.00	0.98	0.13	0.12	0.08	0.55	0.18	0.0104+	0.09	0.60	0.16	0.0396+
CT_Par_L	0.03	0.78	0.13	0.0448+	0.14	0.06	0.15	0.0350+	0.00	0.99	0.11	0.11	-0.02	0.98	0.11	0.13	0.06	0.56	0.15	0.0263+	0.07	0.60	0.13	0.06
CT_Par_R	0.05	0.75	0.16	0.0214+	0.17	0.0466+	0.18	0.0350+	0.04	0.99	0.15	0.05	-0.03	0.98	0.10	0.14	0.07	0.55	0.17	0.0138+	0.08	0.60	0.14	0.06
CT_PFC_L	-0.03	0.80	0.11	0.09	0.11	0.10	0.12	0.07	-0.01	0.99	0.13	0.06	-0.06	0.98	0.09	0.16	0.00	0.95	0.11	0.10	-0.03	0.87	0.07	0.36
CT_PFC_R	0.02	0.89	0.16	0.0185+	0.16	0.0466+	0.16	0.0350+	0.02	0.99	0.16	0.0294+	-0.04	0.98	0.12	0.12	0.05	0.60	0.16	0.0162+	0.02	0.90	0.11	0.12
CT_PM_L	0.03	0.78	0.13	0.0448+	0.10	0.13	0.11	0.08	-0.02	0.99	0.09	0.20	0.00	0.98	0.11	0.12	0.08	0.55	0.16	0.0184+	0.05	0.64	0.12	0.11
CT_PM_R	0.05	0.75	0.17	0.0131+	0.17	0.0466+	0.17	0.0350+	-0.01	0.99	0.12	0.08	-0.02	0.98	0.12	0.12	0.10	0.55	0.20	0.0070++	0.07	0.60	0.15	0.0469+
IFOF_L	0.08	0.75	0.21	0.0073++	0.15	0.0466+	0.15	0.0350+	0.04	0.99	0.18	0.0263+	-0.01	0.98	0.14	0.12	0.09	0.55	0.19	0.0070++	0.09	0.60	0.17	0.0396+
IFOF_R	0.05	0.75	0.19	0.0078++	0.14	0.0466+	0.15	0.0350+	0.04	0.99	0.19	0.0236+	-0.03	0.98	0.13	0.12	0.08	0.55	0.19	0.0082++	0.07	0.60	0.15	0.0438+
ILF_L	0.10	0.64	0.20	0.0078++	0.12	0.08	0.13	0.05	0.07	0.99	0.17	0.0294+	0.00	0.98	0.12	0.12	0.13	0.55	0.21	0.0070++	0.12	0.60	0.17	0.0396+
ILF_R	0.10	0.64	0.19	0.0078++	0.09	0.18	0.10	0.12	0.08	0.99	0.19	0.0236+	0.00	0.98	0.12	0.12	0.11	0.55	0.19	0.0070++	0.11	0.60	0.17	0.0396+
SLF_L	0.00	1.00	0.08	0.23	0.16	0.0466+	0.17	0.0350+	-0.01	0.99	0.07	0.29	-0.03	0.98	0.07	0.35	0.03	0.79	0.10	0.14	0.00	0.99	0.05	0.47
SUF_R	0.11	0.64	0.15	0.0448+	0.16	0.0466+	0.17	0.0350+	0.11	0.99	0.15	0.06	0.09	0.98	0.14	0.12	0.05	0.60	0.10	0.17	0.10	0.60	0.11	0.15
UNC_L	0.07	0.75	0.22	0.0067++	0.16	0.0466+	0.16	0.0350+	0.04	0.99	0.19	0.0236+	-0.01	0.98	0.15	0.12	0.08	0.55	0.19	0.0070++	0.09	0.60	0.17	0.0396+
UNC_R	0.05	0.75	0.19	0.0078++	0.14	0.0466+	0.15	0.0350+	0.03	0.99	0.18	0.0263+	-0.03	0.98	0.13	0.12	0.05	0.60	0.17	0.0138+	0.08	0.60	0.16	0.0396+
Genu	0.00	1.00	0.14	0.0448+	0.12	0.08	0.12	0.07	0.05	0.99	0.16	0.0294+	-0.04	0.98	0.10	0.14	0.00	0.95	0.12	0.08	0.00	0.99	0.08	0.27
Rost	-0.04	0.75	0.09	0.16	0.15	0.0466+	0.15	0.0350+	0.02	0.99	0.13	0.06	-0.07	0.98	0.07	0.32	-0.03	0.79	0.08	0.21	-0.04	0.71	0.04	0.52
Spien	0.15	0.37	0.22	0.0067++	0.09	U.16	U.11	U.10	0.07	U.99	0.15	0.0407+	0.15	0.53	0.23	0.0046++	V.16	0.24	0.23	0.0054++	U. 10	0.60	0.16	0.0396+

Table 6.3.a: Comparison between Age-Sex Corrected and Unadjusted Correlations – AD at age 1 and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted	1	Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted	I
	AD 1 - ELC	1	AD 1 -ELC	1	AD 1 - GM	1	AD 1 - GMI		AD1-FM1		AD 1 - FMI		AD1-EL1		AD 1 -EL1		AD 1 - RL 1		AD 1 - RL1		AD 1 - VR 1		AD 1 - VR1	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval						
ARC_FP_L	-0.01	0.91	-0.01	0.89	-0.04	0.63	-0.04	0.58	-0.01	0.93	-0.02	0.86	-0.03	0.61	-0.04	0.57	0.05	0.71	0.04	0.60	0.00	0.96	0.00	0.98
ARC_FP_R	-0.06	0.49	-0.04	0.65	-0.03	0.67	-0.06	0.44	-0.08	0.38	-0.10	0.21	-0.03	0.63	-0.05	0.47	-0.09	0.66	-0.11	0.26	-0.09	0.59	-0.12	0.26
ARC_FT_L	-0.17	0.09	-0.17	0.10	-0.10	0.24	-0.12	0.10	-0.08	0.37	-0.09	0.32	-0.17	0.07	-0.18	0.0216+	-0.07	0.70	-0.09	0.42	-0.13	0.51	-0.15	0.13
ARC_FT_R	-0.11	0.24	-0.09	0.41	-0.03	0.67	-0.10	0.18	-0.09	0.37	-0.14	0.09	-0.13	0.12	-0.17	0.0216+	-0.07	0.70	-0.12	0.21	-0.10	0.59	-0.15	0.13
ARC_TP_L	-0.05	0.49	-0.05	0.64	-0.04	0.63	-0.06	0.44	-0.05	0.73	-0.06	0.49	-0.12	0.12	-0.13	0.07	0.03	0.87	0.01	0.84	-0.08	0.66	-0.09	0.30
ARC_TP_R	0.00	0.95	0.02	0.89	0.06	0.48	0.01	0.90	0.01	0.93	-0.04	0.70	-0.09	0.21	-0.12	0.09	-0.01	0.96	-0.05	0.54	-0.02	0.90	-0.06	0.50
CF_M_L	-0.08	0.36	-0.07	0.44	-0.11	0.22	-0.13	0.07	-0.13	0.17	-0.15	0.07	-0.17	0.07	-0.19	0.0216+	-0.02	0.96	-0.04	0.59	0.00	0.96	-0.03	0.78
CF_M_R	-0.08	0.36	-0.07	0.44	-0.13	0.10	-0.16	0.0249+	-0.13	0.17	-0.14	0.07	-0.12	0.12	-0.14	0.0457+	-0.05	0.71	-0.08	0.43	-0.03	0.79	-0.07	0.46
Cing_L	-0.07	0.40	-0.08	0.44	-0.04	0.63	-0.05	0.51	-0.08	0.37	-0.08	0.36	-0.11	0.16	-0.11	0.11	-0.05	0.71	-0.06	0.53	-0.06	0.76	-0.07	0.46
Cing_R	-0.07	0.40	-0.07	0.44	-0.06	0.48	-0.08	0.26	-0.04	0.75	-0.05	0.58	-0.10	0.18	-0.11	0.11	-0.02	0.96	-0.04	0.60	-0.08	0.66	-0.10	0.26
CT_M_L	-0.03	0.68	-0.01	0.89	-0.18	0.0220+	-0.22	0.0027++	-0.10	0.28	-0.14	0.08	-0.14	0.10	-0.17	0.0216+	-0.03	0.86	-0.07	0.45	0.04	0.76	-0.01	0.96
CT_M_R	-0.15	0.18	-0.13	0.40	-0.20	0.0151+	-0.24	0.0012++	-0.15	0.14	-0.17	0.0268+	-0.15	0.09	-0.18	0.0216+	-0.13	0.59	-0.17	0.10	-0.06	0.76	-0.10	0.26
CT_Par_L	-0.10	0.25	-0.09	0.41	-0.20	0.0151+	-0.22	0.0027++	-0.08	0.37	-0.11	0.19	-0.19	0.05	-0.21	0.0190+	-0.12	0.59	-0.14	0.10	-0.04	0.76	-0.07	0.44
CT_Par_R	-0.12	0.24	-0.09	0.41	-0.14	0.08	-0.19	0.0077++	-0.20	0.0314+	-0.23	0.0051++	-0.15	0.10	-0.18	0.0216+	-0.10	0.62	-0.14	0.10	-0.05	0.76	-0.11	0.26
CT_PFC_L	-0.09	0.30	-0.08	0.44	-0.15	0.07	-0.17	0.0226+	-0.16	0.11	-0.18	0.0268+	-0.08	0.27	-0.10	0.17	0.01	0.97	-0.02	0.80	-0.06	0.76	-0.09	0.33
CT_PFC_R	-0.13	0.23	-0.11	0.41	-0.18	0.0231+	-0.21	0.0040++	-0.11	0.23	-0.15	0.07	-0.15	0.09	-0.18	0.0216+	-0.01	0.97	-0.04	0.59	-0.04	0.79	-0.08	0.44
CT_PM_L	-0.01	0.93	0.01	0.89	-0.09	0.28	-0.14	0.06	-0.03	0.77	-0.07	0.45	-0.08	0.26	-0.11	D.11	0.00	0.97	-0.04	0.59	0.05	0.76	-0.01	0.96
CT_PM_R	-0.12	0.23	-0.09	0.41	-0.20	0.0151+	-0.25	0.0007+++	-0.13	0.17	-0.17	0.0268+	-0.13	0.12	-0.17	0.0216+	-0.10	0.61	-0.15	0.10	-0.05	0.76	-0.10	0.26
IFOF_L	-0.06	0.46	-0.06	0.49	-0.09	0.30	-0.10	0.18	-0.01	0.93	-0.01	0.86	-0.04	0.58	-0.05	0.47	-0.05	0.71	-0.06	0.47	-0.02	0.88	-0.04	0.69
IFOF_R	-0.11	0.24	-0.12	0.41	-0.05	0.63	-0.04	0.58	-0.04	0.75	-0.02	0.79	-0.08	0.26	-0.08	0.28	-0.08	0.66	-0.07	0.45	-0.05	0.76	-0.04	0.68
ILF_L	-0.07	0.40	-0.07	0.44	-0.14	80.0	-0.16	0.0325+	-0.04	0.77	-0.04	0.68	-0.08	0.27	-0.09	0.20	-0.05	0.71	-0.07	0.47	-0.01	0.96	-0.02	0.82
ILF_R	-0.07	0.40	-0.08	0.44	-0.11	0.19	-0.12	0.10	-0.07	0.47	-0.06	0.49	-0.11	0.16	-0.11	0.12	-0.07	0.70	-0.08	0.42	0.03	0.82	0.01	0.95
SLF_L	-0.13	0.23	-0.11	0.41	-0.07	0.45	-0.10	0.18	-0.10	0.28	-0.13	0.11	-0.11	0.15	-0.13	0.07	-0.08	0.66	-0.11	0.26	-0.10	0.59	-0.12	0.26
SLF_R	-0.22	0.0168+	-0.19	0.07	-0.09	0.28	-0.13	0.08	-0.16	0.11	-0.19	0.0235+	-0.14	0.10	-0.16	0.0232+	-0.11	0.59	-0.14	0.10	-0.16	0.34	-0.19	0.0334+
UNC_L	-0.04	0.63	-0.04	0.69	-0.03	0.68	-0.03	0.61	-0.03	0.79	-0.03	0.74	-0.04	0.55	-0.05	0.47	-0.01	0.96	-0.02	0.82	-0.04	0.79	-0.04	0.69
UNC_R	-0.02	0.78	-0.02	0.83	0.03	0.69	0.04	0.59	0.00	0.96	0.00	0.98	-0.04	0.58	-0.03	0.63	0.06	0.71	0.07	0.46	-0.06	0.76	-0.05	0.68
Genu	-0.07	0.40	-0.03	0.79	-0.20	0.0189+	-0.27	0.0007+++	-0.03	0.77	-0.11	0.18	-0.12	0.14	-0.18	0.0216+	-0.07	0.70	-0.15	0.10	-0.02	0.90	-0.11	0.26
Rost	-0.11	0.24	-0.07	0.44	-0.09	0.30	-0.17	0.0249+	-0.14	0.17	-0.20	0.0215+	-0.10	0.16	-0.16	0.0271+	-0.01	0.96	-0.09	0.40	-0.12	0.55	-0.19	0.0334+
Splen	-0.12	0.23	-0.10	0.41	-0.04	0.63	-0.10	0.18	-0.03	0.77	-0.06	0.49	-0.14	0.10	-0.17	0.0216+	-0.12	0.59	-0.16	0.10	-0.09	0.59	-0.14	0.16

Table 6.3.b: Comparison between Age-Sex Corrected and Unadjusted Correlations – RD at age 1 and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age - Sex		Unadjusted		Age - Sex		Unadjusted	I	Age - Sex		Unadjusted	I	Age - Sex		Unadjusted	1	Age - Sex		Unadjusted		Age - Sex		Unadjusted	i The second
	RD 1 - ELC	1	RD 1 -ELC	1	RD 1 - GM 1	I	RD 1 - GMI		RD 1 - FM 1		RD 1 - FMI		RD 1 - EL 1		RD 1 -EL1		RD 1 - RL 1		RD 1 - RL1		RD 1 - VR 1		RD 1 - VR1	
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval						
ARC FP L	-0.11	0.13	-0.07	0.31	-0.12	0.06	-0.19	0.0035++	-0.12	0.06	-0.18	0.0058++	-0.14	0.06	-0.18	0.0109+	-0.06	0.61	-0.12	0.12	-0.08	0.41	-0.15	0.06
ARC FP R	-0.14	0.07	-0.11	0.22	-0.11	0.10	-0.17	0.0064++	-0.15	0.0248+	-0.20	0.0023++	-0.13	0.07	-0.17	0.0134+	-0.05	0.62	-0.11	0.13	-0.10	0.40	-0.16	0.0462+
ARC FT L	-0.10	0.13	-0.09	0.26	-0.15	0.0299+	-0.19	0.0041++	-0.13	0.0432+	-0.17	0.0098++	-0.14	0.06	-0.17	0.0139+	-0.03	0.70	-0.07	0.30	-0.07	0.55	-0.11	0.14
ARC_FT_R	-0.16	0.0484+	-0.11	0.22	-0.09	0.16	-0.17	0.0075++	-0.14	0.0350+	-0.22	0.0014++	-0.14	0.06	-0.19	0.0093++	-0.06	0.61	-0.13	0.12	-0.15	0.34	-0.22	0.0144+
ARC_TP_L	-0.16	0.0459+	-0.13	0.15	-0.14	0.0352+	-0.20	0.0019++	-0.17	0.0153+	-0.22	0.0013++	-0.20	0.0108+	-0.24	0.0011++	-0.06	0.61	-0.12	0.12	-0.15	0.34	-0.21	0.0144+
ARC_TP_R	-0.13	0.10	-0.09	0.23	-0.08	0.19	-0.15	0.0203+	-0.14	0.0350+	-0.19	0.0033++	-0.14	0.06	-0.18	0.0117+	-0.05	0.62	-0.11	0.13	-0.12	0.37	-0.18	0.0297+
CF_M_L	-0.20	0.0196+	-0.18	0.06	-0.21	0.0037++	-0.23	0.0005+++	-0.20	0.0070++	-0.22	0.0012++	-0.20	0.0108+	-0.21	0.0033++	-0.16	0.20	-0.18	0.0394+	-0.10	0.39	-0.13	0.09
CF_M_R	-0.12	0.11	-0.10	0.23	-0.22	0.0037++	-0.23	0.0005+++	-0.18	0.0111+	-0.20	0.0023++	-0.15	0.0460+	-0.17	0.0134+	-0.12	0.28	-0.15	0.09	-0.02	0.85	-0.05	0.53
Cing_L	-0.08	0.23	-0.06	0.44	-0.18	0.0102+	-0.21	0.0014++	-0.11	0.09	-0.15	0.0193+	-0.10	0.12	-0.13	0.0496+	-0.03	0.70	-0.07	0.33	-0.05	0.56	-0.09	0.19
Cing_R	-0.12	0.11	-0.09	0.26	-0.17	0.0147+	-0.21	0.0014++	-0.11	0.08	-0.16	0.0119+	-0.13	0.06	-0.17	0.0139+	-0.05	0.62	-0.09	0.20	-0.08	0.43	-0.12	0.10
CT_M_L	-0.18	0.0340+	-0.16	0.11	-0.23	0.0037++	-0.26	0.0004+++	-0.16	0.0183+	-0.19	0.0033++	-0.16	0.0419+	-0.19	0.0093++	-0.16	0.20	-0.19	0.0340+	-0.10	0.39	-0.14	0.06
CT_M_R	-0.10	0.13	-0.10	0.23	-0.24	0.0028++	-0.25	0.0004+++	-0.13	0.0432+	-0.14	0.0233+	-0.08	0.21	-0.10	0.13	-0.11	0.36	-0.13	0.12	-0.01	0.85	-0.04	0.58
CT_Par_L	-0.18	0.0340+	-0.15	0.13	-0.21	0.0037++	-0.25	0.0004+++	-0.18	0.0111+	-0.22	0.0013++	-0.24	0.0028++	-0.27	0.0004+++	-0.13	0.27	-0.17	0.0464+	-0.06	0.56	-0.11	0.14
CT_Par_R	-0.10	0.14	-0.08	0.27	-0.14	0.0385+	-0.17	0.0064++	-0.20	0.0070++	-0.22	0.0012++	-0.17	0.0410+	-0.19	0.0093++	-0.10	0.46	-0.13	0.12	-0.01	0.85	-0.06	0.45
CT_PFC_L	-0.04	0.51	-0.03	0.67	-0.20	0.0060++	-0.21	0.0014++	-0.18	0.0111+	-0.20	0.0027++	-0.07	0.28	-0.08	0.19	0.02	0.82	-0.01	0.93	-0.01	0.85	-0.04	0.58
CT_PFC_R	-0.14	0.09	-0.11	0.22	-0.18	0.0113+	-0.22	0.0012++	-0.21	0.0070++	-0.25	0.0007+++	-0.14	0.06	-0.17	0.0139+	-0.05	0.62	-0.09	0.21	-0.06	0.56	-0.11	0.15
CT_PM_L	-0.15	0.0484+	-0.13	0.15	-0.16	0.0147+	-0.20	0.0026++	-0.17	0.0132+	-0.19	0.0028++	-0.11	0.10	-0.14	0.0377+	-0.09	0.46	-0.12	0.12	-0.06	0.56	-0.09	0.19
CT_PM_R	-0.11	0.13	-0.10	0.23	-0.22	0.0037++	-0.24	0.0005+++	-0.16	0.0183+	-0.18	0.0058++	-0.10	0.14	-0.12	0.07	-0.08	0.52	-0.10	0.14	-0.02	0.85	-0.05	0.53
IFOF_L	-0.13	0.09	-0.11	0.22	-0.19	0.0090++	-0.23	0.0005+++	-0.20	0.0070++	-0.22	0.0012++	-0.13	0.07	-0.16	0.0139+	-0.06	0.61	-0.11	0.13	-0.08	0.41	-0.14	0.07
IFOF_R	-0.13	0.10	-0.10	0.23	-0.21	0.0037++	-0.26	0.0004+++	-0.22	0.0069++	-0.25	0.0005+++	-0.16	0.0419+	-0.20	0.0079++	-0.06	0.61	-0.12	0.12	-0.09	0.41	-0.15	0.06
ILF_L	-0.16	0.0459+	-0.14	0.15	-0.21	0.0042++	-0.26	0.0004+++	-0.20	0.0070++	-0.24	0.0008+++	-0.14	0.06	-0.18	0.0109+	-0.10	0.46	-0.15	0.09	-0.12	0.37	-0.18	0.0297+
ILF_R	-0.16	0.0459+	-0.13	0.15	-0.18	0.0113+	-0.24	0.0005+++	-0.22	0.0069++	-0.26	0.0005+++	-0.21	0.0108+	-0.25	0.0011++	-0.09	0.46	-0.16	0.08	-0.10	0.39	-0.17	0.0322+
SLF_L	-0.11	0.12	-0.08	0.28	-0.11	0.09	-0.17	0.0064++	-0.15	0.0227+	-0.21	0.0021++	-0.13	0.07	-0.17	0.0139+	-0.07	0.61	-0.12	0.12	-0.08	0.41	-0.14	0.06
SLF_R	-0.12	0.11	-0.09	0.23	-0.09	0.16	-0.13	0.0397+	-0.15	0.0224+	-0.19	0.0040++	-0.11	0.12	-0.13	0.0449+	-0.03	0.70	-0.07	0.33	-0.08	0.43	-0.11	0.13
UNC_L	-0.04	0.56	-0.03	0.67	-0.15	0.0228+	-0.16	0.0108+	-0.13	0.0432+	-0.14	0.0301+	-0.07	0.28	-0.08	0.21	0.00	0.94	-0.02	0.76	-0.02	0.85	-0.03	0.58
UNC_R	-0.07	0.29	-0.06	0.44	-0.16	0.0177+	-0.19	0.0036++	-0.18	0.0111+	-0.20	0.0023++	-0.08	0.26	-0.10	0.13	-0.04	0.63	-0.07	0.29	-0.04	0.69	-0.08	0.28
Genu	-0.07	0.32	-0.03	0.67	-0.17	0.0147+	-0.23	0.0009+++	-0.18	0.0132+	-0.24	0.0008+++	-0.13	0.08	-0.17	0.0146+	-0.06	0.61	-0.12	0.12	0.01	0.85	-0.06	0.45
Rost	-0.06	0.38	-0.02	0.72	-0.16	0.0147+	-0.23	0.0005+++	-0.19	0.0070++	-0.25	0.0005+++	-0.07	0.27	-0.12	0.06	0.01	0.92	-0.06	0.33	-0.04	0.74	-0.11	0.13
Splen	-0.22	0.0109+	-0.19	0.06	-0.18	0.0113+	-0.23	0.0005+++	-0.19	0.0090++	-0.23	0.0008+++	-0.20	0.0108+	-0.24	0.0011++	-0.14	0.23	-0.19	0.0340+	-0.12	0.37	-0.18	0.0297+

Table 6.3.c: Comparison between Age-Sex Corrected and Unadjusted Correlations –FA at age 1 and MSEL Scores at age 1

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Ago - For		Unadjusted		Ago - Cor		Unadjurded		Am - For		Unadjusted	1	Ago - Cov		Unadjusted		Ago - For		Unadjusted		Ago - Cor		Unadjusted	
	Age-Sex				Age-sex				Age - Sex				Age-sex				Age-sex				Age-sex			
Texet	PAT-ELG	fete Durat	PA I - ELG	tele Durat	PA I - GRIII	febr Dwat	Pogreonie r	febr Durat	Concerner	febr Dwat	PA I - FINI	febr Durat	Dogreonie r	fetr Durat	PA I - ELI	febr Dwat	PAT-RLT	febr Dwat	PAI-KLI Dogeonie r	febr Dwat	Dogreenie r	febr Durat	Dogreonie r	febr Dwat
	n ne	0.40	Pediauli a i	0.97	Pearson st	0.12	Pearson's r	0.0115	Pearson's r	0.09	0.10	0.0052	0.40	0.94	Pediauna i	0.07	D DC	0.02	Pediauna i	0.46	0.09	0.59	Pearson ar	0.05
ARC_FP_L	0.06	0.40	0.04	0.07	0.10	0.13	0.16	0.0115+	0.13	0.00	0.19	0.0053++	0.10	0.24	0.13	0.07	0.00	0.03	0.13	0.10	0.00	0.00	0.16	0.03
ARC_IF_K	0.07	0.07	0.00	0.07	0.11	0.10	0.10	0.0107+	0.09	0.10	0.13	0.00	0.11	0.24	0.14	0.09	0.04	0.03	0.01	0.93	0.00	0.99	0.00	0.00
ADC ET D	0.02	0.07	0.00	0.93	0.11	0.11	0.14	0.0333+	0.10	0.10	0.10	0.0055++	0.03	0.74	0.00	0.49	0.01	0.90	0.03	0.00	0.02	0.94	0.00	0.00
ADC TO I	0.12	0.0427	0.12	0.17	0.15	0.04201	0.19	0.0021	0.12	0.01751	0.19	0.0015	0.14	0.30	0.19	0.02221	0.04	0.65	0.10	0.20	0.12	0.39	0.10	0.03721
ADC TD D	0.17	0.0437+	0.13	0.17	0.13	0.0430+	0.22	0.0031++	0.17	0.0173+	0.22	0.0013++	0.14	0.24	0.10	0.03337	0.10	0.00	0.10	0.07	0.12	0.31	0.19	0.0272+
	0.13	0.0202+	0.16	0.09	0.17	0.0347+	0.22	0.0031++	0.10	0.0121+	0.22	0.0017++	0.00	0.30	0.11	0.13	0.00	0.03	0.10	0.27	0.13	0.31	0.17	0.03
	0.17	0.03934	0.10	0.00	0.17	0.0347+	0.10	0.0112+	0.14	0.00	0.15	0.0231+	0.12	0.24	0.13	0.11	0.13	0.20	0.10	0.07	0.01	0.04	0.13	0.14
Cing I	0.10	0.31	-0.02	0.01	0.17	0.05	0.16	0.0112+	0.12	0.09	0.15	0.0317+	0.01	0.24	0.12	0.11	0.11	0.30	0.12	0.17	0.01	0.94	0.03	0.00
Cing_D	0.05	0.33	0.02	0.00	0.10	0.00	0.10	0.07	0.07	0.34	0.05	0.15	0.01	0.55	0.05	0.50	0.03	0.00	0.01	0.50	0.01	1.00	0.02	0.01
	0.20	0.0172+	0.19	0.0401+	0.14	0.0461+	0.16	0.0187+	0.07	0.51	0.12	0.12	0.04	0.00	0.00	0.30	0.05	0.05	0.04	0.70	0.00	0.31	0.02	0.91
CT M R	0.02	0.88	0.02	0.04011	0.16	0.0420+	0.15	0.0238+	0.04	0.52	0.04	0.51	0.10	0.20	0.02	0.10	0.10	0.20	0.10	0.07	0.10	0.01	-0.03	0.00
	0.16	0.0437+	0.13	0.17	0.12	0.08	0.16	0.0187+	0.18	0.0121+	0.22	0.0014++	0.12	0.30	0.02	0.00	0.00	0.83	D 11	0.23	0.05	0.54	0.03	0.55
CT Par R	0.04	0.77	0.03	0.91	0.09	0.16	0.11	0.10	0.09	0.19	0.10	0.12	0.09	0.34	0.10	0.22	0.05	0.83	0.07	0.46	-0.02	0.94	0.00	0.98
CT PEC I	0.04	0.77	-0.05	0.87	0.15	0.0430+	0.16	0.0187+	0.00	0.10	0.12	0.02	0.00	0.85	0.03	0.64	0.00	0.83	-0.02	0.10	-0.06	0.77	-0.04	0.77
CT PEC R	0.03	0.77	0.00	0.95	0.07	0.31	0.10	D 11	0.16	0.0287+	0.19	0.0053++	0.01	0.00	0.04	0.59	0.04	0.83	0.07	0.46	0.02	0.94	0.06	0.66
CT PM I	0.18	0.0386+	0.17	0.07	0.15	0.0430+	0.16	0.0187+	0.18	0.0131+	0 19	0.0053++	0.10	0.00	0.01	0.13	0.11	0.50	0.12	0.16	0.09	0.47	D 11	0.00
CT PM R	0.04	0.76	0.04	0.87	0.13	0.07	0.12	0.06	0.09	0.20	0.08	0.20	0.04	0.68	0.04	0.59	0.00	0.98	0.00	0.96	-0.02	0.94	-0.02	0.91
IFOF L	0.08	0.46	0.06	0.84	0.13	0.07	0.18	0.0112+	0.21	0.0057++	0.24	0.0008+++	0.09	0.28	0.13	0.11	0.02	0.94	0.07	0.46	0.05	0.83	0.10	0.21
IFOF R	0.08	0.47	0.05	0.87	0.20	0.0281+	0.26	0.0008+++	0.22	0.0025++	0.27	0.0001+++	0.12	0.24	0.17	0.05	0.03	0.83	0.10	0.27	0.05	0.83	0.12	0.15
ILF L	0.13	0.12	0.10	0.34	0.15	0.0430+	0.21	0.0037++	0.23	0.0025++	0.27	0.0001+++	0.11	0.24	0.15	0.08	0.08	0.71	0.14	0.16	0.14	0.31	0.20	0.0272+
ILF R	0.15	0.09	0.11	0.33	0.16	0.0386+	0.23	0.0017++	0.24	0.0020++	0.29	<.0001+++	0.20	0.06	0.24	0.0036++	0.07	0.83	0.13	0.16	0.13	0.31	0.20	0.0272+
SLF L	0.03	0.83	0.00	0.95	0.08	0.24	0.14	0.0375+	0.12	0.10	0.17	0.0102+	0.05	0.68	0.09	0.23	0.00	0.98	0.05	0.60	0.03	0.94	0.09	0.28
SLF_R	-0.02	0.88	-0.03	0.91	0.04	0.50	0.07	0.30	0.06	0.35	0.08	0.20	0.03	0.79	0.04	0.59	-0.04	0.83	-0.02	0.93	-0.03	0.94	0.00	0.99
UNC L	0.01	0.89	0.01	0.95	0.15	0.0430+	0.15	0.0198+	0.14	0.06	0.15	0.0310+	0.05	0.68	0.06	0.50	0.00	0.98	0.01	0.93	-0.02	0.94	0.00	0.98
UNC_R	0.05	0.67	0.04	0.91	0.17	0.0347+	0.21	0.0031++	0.19	0.0121+	0.21	0.0017++	0.04	0.68	0.08	0.32	0.08	0.71	0.12	0.16	-0.01	0.94	0.04	0.77
Genu	0.06	0.66	0.03	0.91	0.09	0.20	0.12	0.07	0.19	0.0121+	0.24	0.0013++	0.11	0.24	0.13	0.11	0.04	0.83	0.07	0.46	-0.03	0.94	0.01	0.92
Rost	0.00	0.95	-0.02	0.93	0.13	0.07	0.17	0.0170+	0.15	0.0317+	0.19	0.0053++	0.01	0.93	0.04	0.59	-0.01	0.98	0.03	0.84	-0.03	0.94	0.02	0.91
Splen	0.23	0.0084++	0.19	0.0401+	0.19	0.0281+	0.24	0.0017++	0.25	0.0017++	0.30	<.0001+++	0.17	0.08	0.21	0.0136+	0.13	0.44	0.17	0.07	0.10	0.39	0.15	0.05

Table 6.4.a: Comparison between Age-Sex Corrected and Unadjusted Correlations – AD at age 1 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year MRI and age at 2-year MSEL testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age -	Sex	Unadju	sted	Age -	- Sex	Unadij	us te d	Age -	Sex	Unadj	us te d	Age	- Sex	Unadju	ısted	Age -	Sex	Unadji	usted	Age -	Sex	Unadju	sted
	AD 1 - E	ELC 2	AD 1 - E	LC 2	AD 1 -	GM 2	AD 1	-GM2	AD 1 -	FM 2	AD 1	- FM2	AD 1	-EL 2	AD 1 -	EL2	AD 1 -	RL 2	AD 1 -	-RL2	AD 1 - 1	VR 2	AD 1 -	VR2
Tract	Pearson's f	dr Pval	Pearson's f	dr Pval	Pearson's	fdr Pval	Pearson's i	fdr Pval	Pearson's i	fdr Pval	Pearson's	fdr Pval	Pearson's f	dr Pval	Pearson's f	dr Pval								
ARC_FP	0.04	0.94	0.03	0.97	0.03	0.80	0.04	0.81	-0.02	0.81	-0.02	0.86	0.05	0.94	0.05	0.97	0.04	0.96	0.04	0.94	0.02	0.89	0.02	0.84
ARC_FP	-0.06	0.94	-0.05	0.97	-0.04	0.79	-0.05	0.75	-0.08	0.58	-0.09	0.49	-0.02	0.94	-0.03	0.97	-0.03	0.96	-0.03	0.94	-0.05	0.89	-0.06	0.84
ARC_FT	-0.04	0.94	-0.06	0.97	0.06	0.76	0.05	0.75	-0.12	0.45	-0.14	0.37	-0.01	0.94	-0.04	0.97	-0.02	0.96	-0.02	0.94	-0.05	0.89	-0.07	0.84
ARC_FT	0.00	0.99	-0.01	0.97	0.03	0.86	0.01	0.94	-0.03	0.81	-0.05	0.70	0.02	0.94	0.01	0.97	0.05	0.96	0.05	0.94	-0.03	0.89	-0.04	0.84
ARC_TP	-0.09	0.94	-0.09	0.96	0.07	0.69	0.06	0.75	-0.11	0.45	-0.11	0.39	-0.04	0.94	-0.04	0.97	-0.12	0.96	-0.12	0.86	-0.10	0.89	-0.10	0.84
ARC_TP	-0.01	0.96	0.01	0.97	0.15	0.32	0.12	0.52	0.06	0.67	0.06	0.68	0.00	0.99	-0.01	0.97	0.01	0.97	0.02	0.94	-0.06	0.89	-0.06	0.84
CF_M_L	-0.07	0.94	-0.10	0.96	0.14	0.34	0.13	0.45	-0.03	0.81	-0.04	0.73	-0.13	0.94	-0.12	0.96	-0.01	0.96	-0.01	0.94	-0.06	0.89	-0.07	0.84
CF_M_R	0.01	0.96	-0.02	0.97	0.11	0.50	0.11	0.52	0.03	0.81	0.01	0.93	-0.04	0.94	-0.04	0.97	0.05	0.96	0.06	0.94	0.00	0.99	-0.02	0.84
Cing_L	-0.11	0.94	-0.15	0.62	0.04	0.80	0.05	0.75	-0.12	0.45	-0.15	0.37	-0.09	0.94	-0.12	0.96	-0.08	0.96	-0.10	0.92	-0.06	0.89	-0.07	0.84
Cing_R	-0.20	0.14	-0.21	0.09	0.02	0.86	0.03	0.83	-0.19	0.20	-0.20	0.12	-0.12	0.94	-0.15	0.96	-0.16	0.91	-0.15	0.86	-0.17	0.49	-0.17	0.42
CT_M_L	-0.07	0.94	-0.09	0.96	80.0	0.69	0.07	0.73	-0.06	0.67	-0.07	0.61	-0.11	0.94	-0.10	0.97	-0.02	0.96	-0.01	0.94	-0.03	0.89	-0.04	0.84
CT_M_R	0.07	0.94	0.04	0.97	80.0	0.69	0.08	0.73	0.02	0.81	0.02	0.86	0.01	0.94	0.02	0.97	0.12	0.96	0.13	0.86	0.09	0.89	0.07	0.84
CT_Par_	-0.09	0.94	80.0-	0.97	0.06	0.69	0.04	0.75	-0.12	0.45	-0.13	0.37	-0.09	0.94	80.0-	0.97	-0.05	0.96	-0.03	0.94	-0.06	0.89	-0.07	0.84
CT_Par_	0.05	0.94	0.02	0.97	0.02	0.86	0.01	0.92	-0.05	0.68	-0.06	0.61	0.05	0.94	0.05	0.97	0.07	0.96	80.0	0.94	0.05	0.89	0.04	0.84
CT_PFC	-0.03	0.94	-0.04	0.97	0.05	0.79	0.03	0.81	-0.06	0.67	-0.07	0.61	0.02	0.94	0.03	0.97	-0.05	0.96	-0.04	0.94	-0.02	0.90	-0.04	0.84
CT_PFC	-0.03	0.94	-0.03	0.97	0.06	0.69	0.05	0.75	-0.05	0.67	-0.05	0.68	0.00	0.99	0.01	0.97	0.00	0.97	0.01	0.94	-0.04	0.89	-0.04	0.84
CT_PM_I	-0.02	0.94	-0.04	0.97	0.15	0.32	0.14	0.45	-0.05	0.67	-0.07	0.61	-0.05	0.94	-0.05	0.97	0.06	0.96	0.06	0.94	-0.03	0.89	-0.05	0.84
CT_PM_I	0.04	0.94	0.00	0.98	0.04	0.79	0.04	0.75	-0.02	0.82	-0.02	0.85	-0.02	0.94	0.00	0.97	0.10	0.96	0.11	0.86	0.06	0.89	0.04	0.84
IFOF_L	0.00	0.99	-0.01	0.97	0.10	0.62	0.09	0.73	-0.10	0.52	-0.12	0.37	0.06	0.94	0.03	0.97	0.02	0.96	0.00	0.97	0.00	0.99	-0.02	0.85
IFOF_R	-0.09	0.94	-0.11	0.96	0.07	0.69	80.0	0.73	-0.16	0.45	-0.16	0.31	-0.03	0.94	-0.05	0.97	-0.03	0.96	-0.03	0.94	-0.09	0.89	-0.10	0.84
ILF_L	0.04	0.94	0.01	0.97	0.12	0.50	0.11	0.52	-0.07	0.67	-0.10	0.44	0.05	0.94	0.01	0.97	0.03	0.96	0.01	0.94	0.05	0.89	0.03	0.84
ILF_R	-0.04	0.94	-0.07	0.97	0.08	0.69	0.09	0.73	-0.11	0.45	-0.12	0.37	-0.04	0.94	-0.06	0.97	0.02	0.96	0.02	0.94	-0.05	0.89	-0.06	0.84
SLF_L	-0.06	0.94	-0.07	0.97	0.02	0.86	0.02	0.88	-0.09	0.58	-0.10	0.44	-0.02	0.94	-0.03	0.97	-0.06	0.96	-0.06	0.94	-0.06	0.89	-0.07	0.84
SLF_R	0.00	0.99	0.02	0.97	0.02	0.86	0.00	0.96	-0.06	0.67	-0.05	0.68	0.02	0.94	0.02	0.97	0.04	0.96	0.06	0.94	0.00	0.99	0.01	0.93
UNC_L	-0.02	0.96	-0.02	0.97	0.15	0.32	0.14	0.45	-0.05	0.67	-0.07	0.61	0.02	0.94	0.01	0.97	0.01	0.96	0.01	0.94	-0.02	0.91	-0.03	0.84
UNC_R	-0.04	0.94	-0.03	0.97	0.15	0.32	0.14	0.45	-0.11	0.45	-0.10	0.44	0.03	0.94	0.05	0.97	0.01	0.97	0.01	0.94	-0.04	0.89	-0.03	0.84
Genu	0.03	0.94	0.02	0.97	0.09	0.69	0.06	0.75	-0.03	0.81	-0.03	0.79	0.03	0.94	0.04	0.97	0.04	0.96	0.05	0.94	0.05	0.89	0.03	0.84
Rost	-0.13	0.94	-0.10	0.96	-0.01	0.94	-0.05	0.75	-0.12	0.45	-0.12	0.37	-0.09	0.94	-0.07	0.97	-0.10	0.96	-0.08	0.94	-0.09	0.89	-0.10	0.84
Splen	0.05	0.94	0.04	0.97	0.04	0.79	0.02	0.88	0.02	0.81	-0.01	0.94	0.04	0.94	0.01	0.97	0.02	0.96	0.02	0.94	0.04	0.89	0.02	0.84

Table 6.4.b: Comparison between Age-Sex Corrected and Unadjusted Correlations – RD at age 1 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year MRI and age at 2-year MSEL testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age -	Sex	Unadju	sted	Age -	- Sex	Unadj	us te d	Age -	Sex	Unadj	us te d	Age -	Sex	Unadju	ıs te d	Age -	Sex	Unadju	sted	Age -	Sex	Unadju	sted
	RD 1 - E	ELC 2	RD 1 - E	ELC 2	RD 1 -	GM 2	RD 1	- GM2	RD 1-	FM 2	RD 1	- FM2	RD 1	EL 2	RD 1 -	EL2	RD 1 -	RL 2	RD 1 -	RL2	RD 1 -	VR 2	RD 1 -	VR2
Tract	Pearson's f	fdr Pval	Pearson's f	dr Pval	Pearson's	fdr Pval	Pearson's f	dr Pval	Pearson's	fdr Pval	Pearson's f	dr Pval	Pearson's i	dr Pval	Pearson's f	dr Pval								
ARC_FP	-0.04	0.91	-0.05	0.88	0.09	0.68	0.09	0.83	-0.12	0.32	-0.11	0.29	-0.04	0.99	-0.03	0.98	0.00	0.96	0.01	0.97	-0.04	0.96	-0.04	0.97
ARC_FP	0.01	0.91	0.03	0.88	0.09	0.68	80.0	0.83	-0.06	0.43	-0.05	0.51	0.02	0.99	0.03	0.98	0.04	0.96	0.07	0.97	0.00	1.00	0.01	0.97
ARC_FT_	0.02	0.91	0.01	0.93	0.10	0.68	0.10	0.83	-0.08	0.36	-0.08	0.38	0.02	0.99	0.03	0.98	0.06	0.96	0.07	0.97	0.01	1.00	0.00	0.97
ARC_FT_	-0.05	0.91	-0.03	0.88	80.0	0.68	0.04	0.84	-0.10	0.33	-0.09	0.36	0.01	0.99	0.03	0.98	-0.01	0.96	0.02	0.97	-0.07	0.96	-0.07	0.97
ARC_TP_	-0.04	0.91	-0.03	0.88	0.07	0.68	0.05	0.84	-0.10	0.33	-0.10	0.34	-0.02	0.99	-0.02	0.98	-0.03	0.96	-0.02	0.97	-0.03	0.96	-0.03	0.97
ARC_TP	-0.08	0.91	-0.07	0.83	0.01	0.89	-0.01	0.95	-0.13	0.25	-0.13	0.25	-0.06	0.99	-0.06	0.98	-0.05	0.96	-0.03	0.97	-0.05	0.96	-0.06	0.97
CF_M_L	-0.12	0.91	-0.12	0.83	0.07	0.68	0.07	0.83	-0.13	0.24	-0.12	0.29	-0.11	0.99	-0.09	0.98	-0.08	0.96	-0.06	0.97	-0.09	0.96	-0.08	0.97
CF_M_R	-0.14	0.91	-0.15	0.83	0.04	0.87	0.05	0.84	-0.16	0.24	-0.14	0.25	-0.14	0.99	-0.10	0.98	-0.10	0.96	-0.07	0.97	-0.11	0.96	-0.11	0.97
Cing_L	0.01	0.95	0.02	0.88	0.05	0.87	0.04	0.84	-0.07	0.40	-0.05	0.53	-0.01	0.99	0.02	0.98	0.05	0.96	0.07	0.97	0.03	0.96	0.04	0.97
Cing_R	0.12	0.91	0.12	0.83	0.11	0.68	0.10	0.83	0.01	0.87	0.02	0.76	0.11	0.99	0.14	0.98	0.15	0.96	0.16	0.68	0.11	0.96	0.10	0.97
CT_M_L	-0.10	0.91	-0.11	0.83	0.03	0.87	0.03	0.84	-0.13	0.24	-0.13	0.25	-0.08	0.99	-0.06	0.98	-0.05	0.96	-0.04	0.97	-0.07	0.96	-0.07	0.97
CT_M_R	-0.05	0.91	-0.09	0.83	-0.02	0.89	0.01	0.95	-0.09	0.34	-0.08	0.36	-0.07	0.99	-0.05	0.98	-0.01	0.96	0.00	0.97	0.00	1.00	-0.01	0.97
CT_Par_I	-0.08	0.91	-0.06	0.83	0.07	0.68	0.05	0.84	-0.11	0.33	-0.10	0.34	-0.04	0.99	-0.03	0.98	-0.04	0.96	-0.02	0.97	-0.07	0.96	-0.07	0.97
CT_Par_I	0.00	0.95	-0.01	0.93	0.07	0.68	0.06	0.84	-0.08	0.35	-0.09	0.36	0.01	0.99	0.01	0.98	0.04	0.96	0.05	0.97	0.01	1.00	0.00	0.97
CT_PFC_	-0.02	0.91	-0.03	0.88	0.01	0.89	0.00	0.95	-0.06	0.43	-0.07	0.42	0.01	0.99	0.02	0.98	-0.03	0.96	-0.02	0.97	0.01	1.00	-0.01	0.97
CT_PFC_	-0.06	0.91	-0.06	0.83	0.05	0.87	0.03	0.84	-0.14	0.24	-0.13	0.25	-0.02	0.99	0.00	0.98	-0.02	0.96	0.00	0.97	-0.05	0.96	-0.06	0.97
CT_PM_I	-0.05	0.91	-0.06	0.83	0.16	0.68	0.16	0.78	-0.10	0.33	-0.10	0.34	-0.02	0.99	0.00	0.98	0.01	0.96	0.03	0.97	-0.05	0.96	-0.06	0.97
CT_PM_F	-0.03	0.91	-0.06	0.83	0.01	0.89	0.03	0.84	-0.10	0.33	-0.09	0.34	-0.04	0.99	-0.03	0.98	0.02	0.96	0.03	0.97	0.00	1.00	-0.01	0.97
IFOF_L	0.03	0.91	0.00	0.96	0.03	0.87	0.03	0.84	-0.11	0.33	-0.13	0.25	0.05	0.99	0.04	0.98	0.07	0.96	0.07	0.97	0.03	0.96	0.01	0.97
IFOF_R	-0.02	0.91	-0.05	0.88	0.03	0.87	0.03	0.84	-0.15	0.24	-0.16	0.25	0.00	0.99	0.00	0.98	0.04	0.96	0.06	0.97	-0.04	0.96	-0.05	0.97
ILF_L	0.04	0.91	0.01	0.93	0.03	0.87	0.02	0.85	-0.09	0.34	-0.11	0.29	0.10	0.99	0.08	0.98	0.03	0.96	0.03	0.97	0.04	0.96	0.02	0.97
ILF_R	-0.05	0.91	-0.07	0.83	0.04	0.87	0.03	0.84	-0.15	0.24	-0.15	0.25	-0.02	0.99	-0.02	0.98	-0.01	0.96	0.00	0.97	-0.08	0.96	-0.09	0.97
SLF_L	-0.06	0.91	-0.06	0.83	0.09	0.68	80.0	0.83	-0.09	0.34	-0.09	0.36	-0.06	0.99	-0.05	0.98	-0.05	0.96	-0.04	0.97	-0.06	0.96	-0.07	0.97
SLF_R	-0.04	0.91	-0.03	0.88	0.11	0.68	0.10	0.83	-0.09	0.34	-0.08	0.36	0.00	0.99	0.01	0.98	-0.01	0.96	0.01	0.97	-0.03	0.96	-0.03	0.97
UNC_L	-0.06	0.91	-0.09	0.83	0.07	0.68	0.08	0.83	-0.16	0.24	-0.17	0.25	-0.03	0.99	-0.02	0.98	0.02	0.96	0.02	0.97	-0.07	0.96	-0.08	0.97
UNC_R	-0.03	0.91	-0.04	0.88	0.03	0.87	0.03	0.84	-0.15	0.24	-0.15	0.25	-0.02	0.99	-0.01	0.98	0.03	0.96	0.04	0.97	-0.02	0.96	-0.03	0.97
Genu	80.0	0.91	0.07	0.83	-0.01	0.89	-0.02	0.85	-0.05	0.52	-0.03	0.67	0.05	0.99	0.07	0.98	0.07	0.96	0.09	0.97	0.13	0.96	0.12	0.97
Rost	0.03	0.91	0.04	88.0	-0.10	0.68	-0.13	0.83	-0.07	0.40	-0.07	0.42	0.02	0.99	0.04	0.98	0.05	0.96	0.07	0.97	0.06	0.96	0.05	0.97
Splen	0.02	0.91	0.02	0.88	0.11	0.68	0.10	0.83	-0.07	0.40	-0.07	0.42	-0.01	0.99	0.00	0.98	0.02	0.96	0.03	0.97	0.02	0.96	0.02	0.97

Table 6.4.c: Comparison between Age-Sex Corrected and Unadjusted Correlations –FA at age 1 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 1-year MRI and age at 2-year MSEL testing. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age	- Sex	Unad	juste d	Age -	Sex	Unadj	juste d	Age -	Sex	Unadj	us te d	Age	- Sex	Unadju	ıs te d	Age	- Sex	Unadju	sted	Age -	Sex	Unadju	usted
	FA 1 -	ELC 2	FA 1 -	ELC 2	FA 1 -	GM 2	FA 1	- GM2	FA 1 -	FM 2	FA 1	-FM2	FA 1	-EL 2	FA 1 -	EL2	FA 1	- RL 2	FA 1 -	RL2	FA 1 -	VR 2	FA 1 -	VR2
Tract	Pearson's	fdr Pval	Pearson's f	dr Pval	Pearson's	fdr Pval	Pearson's f	dr Pval	Pearson's f	dr Pval	Pearson's i	fdr Pval												
ARC_FP	0.05	0.87	0.05	0.99	-0.06	0.87	-0.06	0.95	0.12	0.28	0.12	0.45	0.06	0.93	0.05	0.97	-0.02	0.99	-0.03	0.96	0.05	0.90	0.05	0.98
ARC_FP	-0.09	0.80	-0.08	0.88	-0.11	0.74	-0.11	0.83	-0.01	0.93	-0.01	0.88	-0.07	0.93	-0.07	0.97	-0.12	0.66	-0.13	0.49	-0.06	0.90	-0.06	0.98
ARC_FT_	-0.02	0.87	-0.02	0.99	-0.06	0.87	-0.06	0.95	0.07	0.50	0.05	0.60	-0.03	0.93	-0.06	0.97	-0.08	0.81	-0.10	0.67	-0.01	0.95	-0.01	1.00
ARC_FT_	0.06	0.87	0.02	0.99	-0.05	0.87	-0.03	0.98	0.13	0.28	0.10	0.46	-0.01	0.93	-0.04	0.97	0.00	0.99	-0.03	0.96	0.07	0.90	0.05	0.98
ARC_TP_	-0.04	0.87	-0.03	0.99	-0.02	0.90	-0.02	0.98	0.05	0.62	0.05	0.60	-0.04	0.93	-0.04	0.97	-0.09	0.81	-0.10	0.66	-0.04	0.90	-0.03	0.98
ARC_TP	0.11	0.80	0.12	0.53	0.13	0.74	0.13	0.80	0.23	0.0269+	0.23	0.0385+	0.07	0.93	0.07	0.97	0.07	0.91	0.06	0.92	0.04	0.90	0.05	0.98
CF_M_L	0.09	0.80	0.07	0.88	-0.01	0.97	-0.01	0.98	0.13	0.28	0.09	0.47	0.05	0.93	0.02	0.97	0.08	0.81	0.06	0.92	0.06	0.90	0.05	0.98
CF_M_R	0.19	0.10	0.18	0.16	0.01	0.94	0.00	0.98	0.22	0.0269+	0.19	0.12	0.15	0.61	0.10	0.97	0.15	0.42	0.12	0.49	0.15	0.28	0.14	0.38
Cing_L	80.0-	0.80	-0.12	0.53	-0.02	0.90	0.00	0.98	0.00	1.00	-0.04	0.63	-0.07	0.93	-0.12	0.97	-0.11	0.66	-0.14	0.47	-0.07	0.90	-0.09	0.98
Cing_R	-0.25	0.0142+	-0.24	0.0158+	-0.09	0.74	-0.07	0.95	-0.15	0.28	-0.16	0.23	-0.18	0.37	-0.22	0.06	-0.24	0.0186+	-0.25 (0.0131+	-0.22	0.06	-0.21	0.08
CT_M_L	0.04	0.87	0.03	0.99	-0.03	0.90	-0.04	0.95	0.07	0.50	0.06	0.60	-0.01	0.93	-0.02	0.97	0.04	0.97	0.02	0.96	0.04	0.90	0.03	1.00
CT_M_R	0.09	0.80	0.11	0.53	0.03	0.90	0.01	0.98	0.12	0.28	0.11	0.45	0.07	0.93	0.06	0.97	0.05	0.97	0.05	0.92	0.06	0.90	0.06	0.98
CT_Par_I	0.04	0.87	0.03	0.99	-0.02	0.90	-0.02	0.98	0.07	0.50	0.05	0.60	-0.04	0.93	-0.07	0.97	0.03	0.98	0.01	0.98	0.06	0.90	0.05	0.98
CT_Par_I	0.06	0.87	0.05	0.99	-0.09	0.74	-0.09	0.83	0.10	0.42	0.09	0.47	0.02	0.93	0.02	0.97	0.01	0.99	0.00	0.98	0.06	0.90	0.05	0.98
CT_PFC_	-0.01	0.91	-0.01	0.99	0.04	0.90	0.04	0.95	0.04	0.62	0.04	0.70	-0.01	0.93	-0.03	0.97	-0.04	0.97	-0.05	0.92	-0.04	0.90	-0.04	0.98
CT_PFC	0.02	0.87	0.01	0.99	0.00	0.98	0.01	0.98	0.12	0.30	0.10	0.46	0.01	0.93	-0.01	0.97	-0.04	0.97	-0.05	0.92	0.01	0.95	0.01	1.00
CT_PM_I	0.06	0.87	0.05	0.99	-0.10	0.74	-0.10	0.83	0.08	0.50	0.06	0.60	-0.01	0.93	-0.03	0.97	0.04	0.97	0.03	0.96	0.05	0.90	0.04	0.98
CT_PM_F	0.05	0.87	0.05	0.99	-0.02	0.90	-0.03	0.95	0.10	0.37	0.09	0.47	0.02	0.93	0.01	0.97	0.01	0.99	0.01	0.98	0.03	0.90	0.03	1.00
IFOF_L	-0.03	0.87	0.00	0.99	0.05	0.87	0.03	0.95	0.06	0.55	0.06	0.60	-0.01	0.93	-0.02	0.97	-0.06	0.95	-0.07	0.90	-0.02	0.95	-0.01	1.00
IFOF_R	-0.03	0.87	-0.02	0.99	0.03	0.90	0.03	0.95	80.0	0.50	80.0	0.55	-0.02	0.93	-0.03	0.97	-0.08	0.87	-0.09	0.68	-0.02	0.95	-0.01	1.00
	-0.02	0.87	0.00	0.99	0.06	0.87	0.06	0.95	0.06	0.55	0.06	0.60	-0.07	0.93	-0.08	0.97	-0.03	0.98	-0.04	0.93	-0.02	0.95	0.00	1.00
ILF_R	0.06	0.87	0.06	0.97	-0.02	0.90	-0.01	0.98	0.12	0.30	0.12	0.45	0.02	0.93	0.01	0.97	0.02	0.98	0.01	0.98	80.0	0.90	80.0	0.98
SLF_L	0.00	0.99	0.00	0.99	-0.06	0.87	-0.05	0.95	0.06	0.55	0.05	0.60	0.02	0.93	0.00	0.99	-0.04	0.97	-0.06	0.92	0.00	0.95	0.00	1.00
SLF_R	0.03	0.87	0.04	0.99	-0.13	0.74	-0.12	0.80	0.05	0.60	0.05	0.60	-0.01	0.93	-0.02	0.97	0.01	0.99	0.00	0.98	0.03	0.90	0.04	0.98
UNC_L	0.06	0.87	80.0	0.87	0.06	0.87	0.04	0.95	0.16	0.28	0.14	0.32	0.04	0.93	0.02	0.97	0.00	0.99	0.00	0.98	0.06	0.90	0.06	0.98
UNC_R	0.00	0.99	0.02	0.99	0.09	0.74	80.0	0.87	0.09	0.45	0.09	0.47	0.03	0.93	0.02	0.97	-0.03	0.98	-0.04	0.93	-0.01	0.95	0.00	1.00
Genu	-0.11	0.80	-0.11	0.53	80.0	0.81	0.08	0.87	0.04	0.71	0.01	0.88	-0.06	0.93	-0.09	0.97	-0.11	0.79	-0.12	0.49	-0.16	0.28	-0.16	0.37
Rost	-0.14	0.56	-0.14	0.53	0.14	0.74	0.15	0.80	0.02	0.89	0.01	0.88	-0.10	0.93	-0.12	0.97	-0.15	0.42	-0.16	0.43	-0.15	0.28	-0.15	0.37
Splen	0.03	0.87	0.01	0.99	-0.10	0.74	-0.09	0.83	0.14	0.28	0.11	0.46	0.05	0.93	0.01	0.97	0.00	0.99	-0.02	0.96	0.01	0.95	0.00	1.00

Table 6.5.a: Comparison between Age-Sex Corrected and Unadjusted Correlations –AD at age 2 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 2-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age -	Sex	Unadjus	sted	Age - S	iex	Una dijus	ted	Age -	Sex	Unadju	sted	Age -	Sex	Unadju	sted	Age - 1	Sex	Unadju	sted	Age -	Sex	Unadju	sted
	AD 2 - E	LC 2	AD 2 - E	LC 2	AD 2 - G	3M 2	AD 2 - G	M2	AD 2 -	FM 2	AD 2 -	FM2	AD 2 - I	EL 2	AD 2 -	EL2	AD 2 - I	ðl. 2	AD 2 -	RL2	AD 2 - 1	VR 2	AD 2 - 1	vR2
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval
ARC_FP_L	0.18	0.47	0.17	0.48	-0.05	0.98	-0.05	0.89	-0.05	0.77	-0.06	0.71	0.21	0.17	0.19	0.26	0.23	0.07	0.21	0.13	0.13	0.47	0.12	0.47
ARC_FP_R	0.01	1.00	-0.02	0.97	-0.03	0.98	-0.03	0.95	-0.06	0.74	-0.08	0.71	0.05	0.70	0.03	0.80	0.07	0.51	0.04	0.67	-0.04	0.96	-0.04	0.94
ARC_FT_L	0.00	1.00	0.00	0.97	-0.06	0.97	-0.08	0.73	-0.10	0.72	-0.13	0.62	0.05	0.70	0.04	0.78	0.03	0.77	0.02	0.90	-0.01	0.98	-0.02	0.98
ARC_FT_R	0.02	0.99	0.03	0.92	-0.01	0.98	-0.01	0.95	-0.03	0.80	-0.05	0.72	0.06	0.70	0.05	0.78	0.09	0.46	0.07	0.48	-0.03	0.98	-0.03	0.98
ARC_TP_L	0.03	0.99	0.04	0.91	-0.09	0.97	-0.10	0.69	-0.05	0.77	-0.05	0.71	0.04	0.70	0.05	0.78	0.05	0.60	0.05	0.61	0.02	0.98	0.02	0.98
ARC_TP_R	0.01	1.00	0.04	0.91	0.03	0.98	0.02	0.95	-0.06	0.74	-0.06	0.71	0.04	0.70	0.05	0.78	0.10	0.43	0.11	0.45	-0.02	0.98	-0.01	0.98
CF_M_L	0.07	0.81	0.07	0.76	-0.04	0.98	0.13	0.69	-0.07	0.74	0.02	0.89	0.03	0.75	0.09	0.68	0.10	0.43	0.15	0.33	0.11	0.47	0.03	0.98
CF_M_R	0.10	0.58	0.10	0.53	-0.01	0.98	-0.03	0.95	-0.04	0.80	-0.05	0.71	0.05	0.70	0.04	0.78	0.13	0.39	0.12	0.39	0.11	0.49	0.09	0.68
Cing_L	-0.03	0.99	0.00	0.97	-0.06	0.97	-0.11	0.69	-0.10	0.72	-0.09	0.62	-0.04	0.70	0.02	0.89	0.03	0.77	0.05	0.61	0.05	0.90	0.05	0.82
Cing_R	-0.16	0.47	-0.13	0.48	-0.15	0.97	0.09	0.69	-0.16	0.41	-0.06	0.71	-0.08	0.70	-0.13	0.30	-0.11	0.43	-0.09	0.45	-0.09	0.61	-0.16	0.47
CT_M_L	0.00	1.00	0.00	0.97	-0.10	0.97	-0.11	0.69	-0.09	0.72	-0.09	0.62	0.01	0.89	0.02	0.89	0.05	0.60	0.05	0.61	0.06	0.88	0.05	0.82
CT_M_R	0.02	0.99	0.05	0.91	-0.05	0.98	-0.05	0.89	-0.16	0.41	-0.15	0.62	0.05	0.70	0.06	0.77	0.08	0.46	0.10	0.45	0.05	0.88	0.06	0.82
CT_Par_L	-0.02	0.99	0.02	0.97	-0.12	0.97	-0.13	0.69	-0.10	0.72	-0.10	0.62	-0.04	0.70	-0.02	0.88	-0.03	0.77	-0.01	0.94	0.08	0.69	0.08	0.68
CT_Par_R	0.08	0.71	0.08	0.75	-0.14	0.97	-0.13	0.69	-0.09	0.72	-0.10	0.62	0.06	0.70	0.07	0.75	0.08	0.46	0.08	0.45	0.12	0.47	0.12	0.47
CT_PFC_L	0.13	0.47	0.11	0.48	-0.04	0.98	-0.05	0.89	-0.03	0.80	-0.05	0.74	0.15	0.32	0.13	0.30	0.10	0.43	0.08	0.45	0.14	0.47	0.12	0.47
CT_PFC_R	0.04	0.99	0.06	0.91	0.00	0.98	-0.02	0.95	-0.07	0.74	-0.07	0.71	0.15	0.32	0.13	0.30	0.09	0.46	0.09	0.45	0.01	0.98	0.00	0.99
CT_PM_L	0.10	0.57	0.11	0.48	-0.09	0.97	-0.10	0.69	-0.09	0.72	-0.10	0.62	0.08	0.70	0.09	0.68	0.13	0.39	0.14	0.33	0.15	0.47	0.14	0.47
CT_PM_R	0.03	0.99	0.04	0.91	-0.10	0.97	-0.10	0.69	-0.16	0.41	-0.16	0.62	0.07	0.70	0.07	0.74	0.09	0.46	0.09	0.45	0.06	0.87	0.06	0.82
IFOF_L	0.12	0.47	0.10	0.53	0.04	0.98	0.03	0.95	0.03	0.80	-0.01	0.94	0.15	0.32	0.14	0.30	0.10	0.43	0.08	0.45	0.12	0.47	0.10	0.63
IFOF_R	0.00	1.00	0.01	0.97	0.01	0.98	0.01	0.95	-0.11	0.72	-0.11	0.62	0.07	0.70	0.07	0.74	0.07	0.47	0.08	0.45	-0.01	0.98	-0.01	0.98
ILF_L	0.15	0.47	0.13	0.48	0.01	0.98	0.01	0.95	0.03	0.80	0.01	0.94	0.14	0.32	0.16	0.30	0.14	0.39	0.14	0.33	0.13	0.47	0.12	0.47
ILF_R	0.03	0.99	0.03	0.91	0.00	0.98	0.00	0.97	-0.06	0.74	-0.07	0.71	0.05	0.70	0.05	0.78	0.07	0.51	0.07	0.50	0.01	0.98	0.02	0.98
SLF_L	0.14	0.47	0.14	0.48	-0.07	0.97	-0.07	0.78	-0.02	0.83	-0.03	0.83	0.18	0.30	0.18	0.26	0.21	0.10	0.20	0.13	0.08	0.69	0.08	0.68
SLF_R	0.12	0.47	0.14	0.48	-0.02	0.98	-0.03	0.95	-0.03	0.80	-0.04	0.79	0.13	0.34	0.13	0.30	0.15	0.39	0.15	0.33	0.05	0.88	0.06	0.82
UNCL	0.13	0.47	0.11	0.48	0.00	0.98	0.00	0.97	-0.03	0.80	-0.04	0.77	0.17	0.30	0.15	0.30	0.16	0.39	0.15	0.33	0.13	0.47	0.12	0.47
UNC R	0.04	0.99	0.03	0.91	0.07	0.97	0.06	0.85	-0.07	0.74	-0.06	0.71	0.05	0.70	0.04	0.79	0.11	0.43	0.10	0.45	0.00	0.98	0.00	0.99
Genu	0.03	0.99	0.03	0.91	-0.07	0.97	-0.09	0.69	-0.08	0.74	-0.10	0.62	0.10	0.64	0.07	0.74	0.11	0.43	0.09	0.45	0.00	0.98	-0.01	0.98
Rost	-0.11	0.55	-0.12	0.48	-0.08	0.97	-0.10	0.69	-0.09	0.72	-0.11	0.62	0.02	0.89	-0.01	0.93	-0.08	0.46	-0.10	0.45	-0.13	0.47	-0.15	0.47
Splen	-0.01	1.00	0.00	0.97	-0.02	0.98	-0.03	0.95	0.02	0.83	-0.01	0.94	0.00	1.00	0.00	0.96	0.01	0.85	0.01	0.93	-0.03	0.97	-0.03	0.98

Table 6.5.b: Comparison between Age-Sex Corrected and Unadjusted Correlations – RD at age 2 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 2-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age -	Sex	Unadjus	sted	Age - S	Sex	Unadjus	ted	Age - S	Sex	Unadju	sted	Age -	Sex	Unadju	sted	Age - 1	Sex	Unadjus	ted	Age -	Sex	Unadju	sted
	RD 2 - E	LC 2	RD 2 - E	LC 2	RD 2 - G	SM 2	RD 2 - 0	M 2	RD 2 - F	M 2	RD 2 -	FM2	RD 2 - I	EL 2	RD 2 -	EL2	RD 2 - I	ðL 2	RD 2 - F	8L2	RD 2 - 1	VR 2	RD 2 - 1	VR2
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval						
ARC_FP_L	0.00	0.97	0.03	0.93	-0.07	0.77	-0.07	0.68	-0.11	0.42	-0.09	0.49	-0.04	0.96	-0.01	0.99	0.06	0.87	0.09	0.72	0.03	0.86	0.04	0.91
ARC_FP_R	0.09	0.81	0.12	0.73	-0.02	0.89	-0.02	0.82	-0.06	0.67	-0.04	0.67	0.06	0.96	0.08	0.99	0.10	0.80	0.13	0.50	0.08	0.80	0.09	0.88
ARC_FT_L	0.01	0.97	0.03	0.93	-0.06	0.77	-0.06	0.68	-0.10	0.42	-0.09	0.50	-0.03	0.96	0.00	0.99	0.10	0.80	0.12	0.53	0.05	0.86	0.06	0.91
ARC_FT_R	-0.01	0.97	0.03	0.93	-0.04	0.85	-0.05	0.73	-0.11	0.42	-0.09	0.49	-0.03	0.96	-0.01	0.99	0.04	0.87	0.07	0.72	0.03	0.86	0.04	0.91
ARC_TP_L	-0.02	0.97	0.00	1.00	-0.09	0.77	-0.10	0.68	-0.11	0.42	-0.10	0.48	-0.01	0.96	0.00	0.99	0.04	0.87	0.05	0.72	0.02	0.86	0.03	0.91
ARC_TP_R	0.01	0.97	0.03	0.93	-0.08	0.77	-0.09	0.68	-0.12	0.42	-0.10	0.48	0.00	0.99	0.01	0.99	0.03	0.91	0.05	0.72	0.07	0.85	0.07	0.88
CF_M_L	-0.10	0.81	0.09	0.89	-0.06	0.77	0.09	0.68	-0.19	0.36	0.06	0.65	-0.05	0.96	0.05	0.99	-0.03	0.91	0.12	0.53	-0.03	0.86	0.02	0.93
CF_M_R	-0.06	0.97	-0.06	0.93	-0.14	0.77	-0.15	0.50	-0.12	0.42	-0.11	0.47	-0.03	0.96	-0.03	0.99	0.01	0.99	0.01	0.93	-0.05	0.86	-0.07	0.88
Cing_L	0.08	0.81	-0.01	0.93	-0.02	0.89	-0.07	0.68	-0.09	0.52	-0.13	0.47	0.09	0.96	0.02	0.99	0.10	0.80	0.06	0.72	0.11	0.79	0.00	0.95
Cing_R	0.13	0.73	0.15	0.73	0.02	0.89	0.05	0.73	-0.04	0.71	0.17	0.47	0.11	0.96	0.05	0.99	0.16	0.45	0.17	0.37	0.11	0.79	0.11	0.88
CT_M_L	-0.03	0.97	-0.01	0.93	-0.05	0.85	-0.07	0.68	-0.13	0.42	-0.13	0.47	0.01	0.96	0_02	0.99	0.05	0.87	0.06	0.72	0.01	0.90	0.00	0.95
CT_M_R	0.05	0.97	0.04	0.93	-0.04	0.85	-0.03	0.75	-0.05	0.67	-0.05	0.65	0.04	0.96	0.05	0.99	0.07	0.87	0.08	0.72	0.08	0.79	0.07	0.88
CT_Par_L	0.01	0.97	0.03	0.93	-0.09	0.77	-0.11	0.68	-0.10	0.42	-0.11	0.47	0.10	0.96	0.10	0.99	0.00	0.99	0.01	0.93	0.06	0.86	0.05	0.91
CT_Par_R	0.02	0.97	0.03	0.93	-0.04	0.85	-0.05	0.73	-0.09	0.53	-0,10	0.49	0.05	0.96	0.05	0.99	0.01	0.98	0.01	0.93	0.05	0.86	0.04	0.91
CT_PFC_L	0.17	0.73	0.15	0.73	-0.10	0.77	-0.11	0.68	0.00	0.99	-0.02	0.84	0.13	0.96	0.12	0.99	0.10	0.80	0.08	0.72	0.22	0.16	0.19	0.36
CT_PFC_R	0.03	0.97	0.05	0.93	-0.09	0.77	-0.11	0.68	-0.06	0.67	-0.06	0.65	0.10	0.96	0.10	0.99	0.04	0.87	0.05	0.72	0.04	0.86	0.02	0.91
CT_PM_L	0.00	0.97	0.01	0.93	-0.01	0.91	-0.03	0.82	-0.07	0.58	-0.08	0.57	0.04	0.96	0.05	0.99	0.02	0.93	0.03	0.79	0.02	0.86	0.01	0.95
CT_PM_R	0.05	0.97	0.04	0.93	-0.06	0.77	-0.07	0.68	-0.04	0.69	-0.05	0.65	0.02	0.96	0.03	0.99	0.08	0.82	0.08	0.72	0.08	0.79	0.07	0.88
IFOF_L	0.03	0.97	0.02	0.93	-0.06	0.77	-0.06	0.69	-0.05	0.67	-0.07	0.57	-0.01	0.96	0.00	0.99	0.06	0.87	0.06	0.72	0.06	0.86	0.04	0.91
IFOF_R	-0.02	0.97	-0.01	0.93	-0.04	0.85	-0.04	0.73	-0.12	0.42	-0.13	0.47	-0.02	0.96	0.00	0.99	0.03	0.91	0.04	0.72	0.01	0.92	0.01	0.95
ILF_L	0.06	0.97	0.05	0.93	-0.09	0.77	-0.08	0.68	-0.03	0.80	-0.04	0.67	0.03	0.96	0.05	0.99	0.07	0.87	0.07	0.72	0.09	0.79	0.07	0.88
ILF_R	-0.04	0.97	-0.02	0.93	-0.08	0.77	-0.08	0.68	-0.12	0.42	-0.13	0.47	0.01	0.96	0.01	0.99	0.00	0.99	0.01	0.93	-0.03	0.86	-0.03	0.91
SLF_L	0.02	0.97	0.02	0.93	-0.06	0.77	-0.06	0.68	-0.05	0.67	-0.05	0.65	0.01	0.96	0.03	0.99	0.06	0.87	0.07	0.72	0.03	0.86	0.03	0.91
SLF_R	-0.04	0.97	0.01	0.93	-0.01	0.93	-0.02	0.82	-0.14	0.42	-0.12	0.47	-0.02	0.96	0.01	0.99	-0.01	0.98	0.02	0.90	0.02	0.88	0.03	0.91
UNC_L	0.13	0.73	0.12	0.73	-0.02	0.89	-0.02	0.82	-0.05	0.68	-0.04	0.68	0.06	0.96	0.07	0.99	0.16	0.45	0.17	0.37	0.18	0.34	0.17	0.36
UNC_R	0.09	0.81	0.08	0.90	-0.03	0.89	-0.04	0.73	-0.05	0.67	-0.05	0.65	0.03	0.96	0.03	0.99	0.15	0.45	0.14	0.44	0.10	0.79	0.08	0.88
Genu	0.12	0.73	0.13	0.73	-0.15	0.77	-0.16	0.50	0.01	0.90	0.02	0.84	0.07	0.96	0.06	0.99	0.15	0.45	0.15	0.44	0.15	0.64	0.13	0.85
Røst	0.12	0.73	0.10	0.89	-0.13	0.77	-0.15	0.50	0.08	0.58	0.05	0.65	0.07	0.96	0.05	0.99	0.09	0.82	0.06	0.72	0.12	0.79	0.09	0.88
Splen	-0.11	0.73	-0.09	0.89	-0.09	0.77	-0.11	0.68	-0.13	0.42	-0.14	0.47	-0.11	0.96	-0.11	0.99	-0.05	0.87	-0.05	0.72	-0.08	0.79	-0.09	0.88

Table 6.5.c: Comparison between Age-Sex Corrected and Unadjusted Correlations –FA at age 2 and MSEL Scores at age 2

Tables display Pearson's correlations by each tract with FDR-corrected p-values. Age-Sex models are corrected for age at 2-year visit. Cells highlighted in yellow are significant in one model (i.e. unadjusted *or* Age-Sex), cells in yellow are significant in both models, and cells highlighted in gray are of a similar magnitude/trend to those significant in the other model.

	Age-S	iex	Unadjus	sted	Age - :	Sex	Unadjust	ed	Age -	Sex	Unadju	sted	Age -	Sex	Unadju	sted	Age -	Sex	Unadju	sted	Age - :	Sex	Unadjur	sted
	FA 2 - E	LC 2	FA 2 - E	LC 2	FA 2 - 0	GM 2	FA 2 - G	12	FA 2 - I	FM 2	FA 2 -	FM2	FA 2 - I	EL 2	FA 2 -	EL2	FA 2 - I	ðl. 2	FA 2 - I	RL2	FA 2 - \	/R 2	FA 2 -1	VR2
Tract	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r	fdr Pval	Pearson's r fe	tr Pval	Pearson's r	fdr Pval														
ARC_FP_L	0.09	0.58	0.06	0.84	0.03	0.95	0.02	0.93	0.08	0.70	0.05	0.76	0.15	0.51	0.11	0.89	0.05	0.94	0.01	0.98	0.03	0.87	0.02	0.92
ARC_FP_R	-0.12	0.43	-0.15	0.33	-0.01	0.95	-0.01	0.93	0.01	0.92	-0.02	0.82	-0.07	0.86	-0.09	0.89	-0.11	0.68	-0.14	0.70	-0.12	0.48	-0.13	0.35
ARC_FT_L	-0.02	0.95	-0.04	0.86	0.01	0.95	0.00	1.00	0.06	0.70	0.02	0.82	0.03	0.86	0.00	0.99	-0.09	0.76	-0.12	0.70	-0.07	0.68	-0.09	0.75
ARC_FT_R	-0.01	0.96	-0.03	0.86	0.04	0.95	0.04	0.93	0.11	0.70	0.08	0.74	0.03	0.86	0.01	0.99	-0.03	0.94	-0.06	0.98	-0.07	0.70	-0.08	0.76
ARC_TP_L	0.05	0.80	0.04	0.86	0.02	0.95	0.02	0.93	0.09	0.70	0.09	0.71	0.04	0.86	0.02	0.99	0.01	0.94	-0.01	0.98	0.02	0.88	0.02	0.92
ARC_TP_R	0.00	0.96	0.02	0.93	0.08	0.95	0.08	0.93	0.09	0.70	0.09	0.71	0.03	0.86	0.03	0.99	0.03	0.94	0.03	0.98	-0.09	0.68	-0.07	0.76
CF_M_L	0.17	0.22	-0.06	0.84	0.06	0.95	-0.03	0.93	0.17	0.43	-0.06	0.74	0.09	0.67	0.01	0.99	0.12	0.68	-0.04	0.98	0.11	0.49	-0.02	0.92
CF_M_R	0.15	0.35	0.15	0.33	0.13	0.95	0.13	0.93	0.10	0.70	0.09	0.71	0.07	0.86	0.07	0.99	0.10	0.68	0.10	0.83	0.14	0.40	0.14	0.30
Cing_L	-0.09	0.58	0.03	0.86	-0.03	0.95	0.02	0.93	0.02	0.86	0.09	0.71	-0.11	0.67	0.01	0.99	-0.07	0.94	0.00	0.98	-0.07	0.68	0.03	0.92
Cing_R	-0.21	0.18	-0.20	0.28	-0.12	0.95	0.01	0.93	-0.07	0.70	-0.16	0.50	-0.15	0.51	-0.13	0.89	-0.20	0.32	-0.20	0.30	-0.15	0.34	-0.18	0.18
CT_M_L	0.04	0.86	0.03	0.86	0.01	0.95	0.02	0.93	0.10	0.70	0.09	0.71	0.01	0.92	0.01	0.99	0.01	0.94	0.00	0.98	0.02	0.88	0.03	0.92
CT_M_R	-0.02	0.95	0.00	0.99	-0.01	0.95	-0.01	0.93	-0.03	0.82	-0.03	0.82	0.01	0.93	0.00	0.99	-0.01	0.94	-0.01	0.98	-0.04	0.84	-0.02	0.92
CT_Par_L	0.03	0.95	0.04	0.86	0.02	0.95	0.03	0.93	0.08	0.70	0.09	0.71	-0.13	0.58	-0.11	0.89	0.01	0.94	0.02	0.98	0.06	0.70	0.09	0.75
CT_Par_R	0.05	0.80	0.04	0.86	-0.07	0.95	-0.05	0.93	0.07	0.70	0.07	0.74	-0.01	0.92	-0.01	0.99	0.02	0.94	0.02	0.98	0.04	0.84	0.06	0.81
CT_PFC_L	-0.13	0.43	-0.13	0.42	0.10	0.95	0.11	0.93	-0.04	0.79	-0.05	0.76	-0.04	0.86	-0.04	0.99	-0.06	0.94	-0.07	0.98	-0.20	0.14	-0.18	0.18
CT_PFC_R	-0.06	0.80	-0.06	0.84	0.07	0.95	0.08	0.93	-0.03	0.82	-0.04	0.82	-0.03	0.86	-0.03	0.99	-0.03	0.94	-0.04	0.98	-0.08	0.68	-0.07	0.76
CT_PM_L	0.10	0.54	0.09	0.84	-0.04	0.95	-0.02	0.93	0.04	0.79	0.03	0.82	0.03	0.86	0.03	0.99	0.09	0.76	0.07	0.98	0.12	0.48	0.12	0.42
CT_PM_R	-0.02	0.95	0.00	0.99	-0.02	0.95	-0.01	0.93	-0.06	0.70	-0.05	0.76	0.03	0.86	0.03	0.99	-0.02	0.94	-0.02	0.98	-0.03	0.88	-0.01	0.92
IFOF_L	0.06	0.80	0.06	0.84	0.08	0.95	0.07	0.93	0.06	0.70	0.06	0.74	0.13	0.58	0.11	0.89	0.01	0.94	0.00	0.98	0.04	0.84	0.04	0.92
IFOF_R	0.01	0.96	0.00	0.99	0.04	0.95	0.05	0.93	0.06	0.70	0.06	0.74	0.06	0.86	0.04	0.99	-0.01	0.94	-0.03	0.98	-0.04	0.84	-0.04	0.92
ILF_L	0.07	0.80	0.07	0.84	0.06	0.95	0.06	0.93	0.06	0.70	0.06	0.74	0.09	0.67	0.09	0.89	0.05	0.94	0.05	0.98	0.02	0.88	0.03	0.92
ILF_R	0.08	0.73	0.06	0.84	0.06	0.95	0.06	0.93	0.13	0.70	0.14	0.71	0.04	0.86	0.03	0.99	0.04	0.94	0.03	0.98	0.05	0.84	0.05	0.86
SLF_L	0.06	0.80	0.06	0.84	0.02	0.95	0.02	0.93	0.04	0.79	0.02	0.82	0.10	0.67	0.09	0.89	0.05	0.94	0.04	0.98	0.00	0.99	0.01	0.92
SLF_R	0.12	0.43	0.09	0.84	-0.03	0.95	-0.03	0.93	0.12	0.70	0.10	0.71	0.10	0.67	0.07	0.99	0.13	0.68	0.09	0.98	0.02	0.88	0.01	0.92
UNC_L	-0.01	0.96	-0.02	0.91	0.04	0.95	0.04	0.93	0.04	0.79	0.02	0.82	0.09	0.67	0.07	0.99	-0.03	0.94	-0.05	0.98	-0.08	0.68	-0.08	0.76
UNC_R	-0.03	0.93	-0.03	0.86	0.08	0.95	0.08	0.93	0.00	0.99	0.00	0.98	0.04	0.86	0.03	0.99	-0.03	0.94	-0.04	0.98	-0.08	0.68	-0.07	0.76
Genu	-0.12	0.47	-0.13	0.42	0.10	0.95	0.11	0.93	-0.04	0.79	-0.06	0.74	0.01	0.92	0.00	0.99	-0.13	0.68	-0.13	0.70	-0.17	0.29	-0.17	0.22
Rost	-0.18	0.18	-0.17	0.28	0.10	0.95	0.11	0.93	-0.13	0.70	-0.11	0.71	-0.04	0.86	-0.03	0.99	-0.14	0.68	-0.12	0.70	-0.21	0.14	-0.19	0.18
Splen	0.19	0.18	0.17	0.28	0.08	0.95	0.10	0.93	0.21	0.17	0.19	0.33	0.19	0.39	0.19	0.39	0.11	0.68	0.10	0.83	0.14	0.40	0.15	0.30