

Supplementary Table 2. ICA laterality and asymmetry detailed results

Detailed left/right/mean/asymmetry results for reaction time and fluid intelligence.

A. Reaction-time single laterality models

Context	Exposure	n	Estimate (SE)	p	FDR
Cross	Right ICA ATT	3,254	0.059 (0.020)	0.00275	0.00549
Cross	Left ICA ATT	3,254	0.065 (0.020)	0.00089	0.00323
Cross	Mean ICA ATT	3,254	0.065 (0.020)	0.00108	0.00323
Cross	Right-left difference	3,254	-0.008 (0.017)	0.625	0.833
Cross	Absolute asymmetry	3,254	0.010 (0.017)	0.565	0.833
Cross	Asymmetry index	3,254	-0.005 (0.017)	0.792	0.864
Follow-up	Right ICA ATT	3,248	0.056 (0.018)	0.00152	0.00364
Follow-up	Left ICA ATT	3,248	0.060 (0.018)	0.000708	0.00323
Follow-up	Mean ICA ATT	3,248	0.061 (0.018)	0.000687	0.00323
Follow-up	Right-left difference	3,248	-0.004 (0.016)	0.792	0.864
Follow-up	Absolute asymmetry	3,248	0.021 (0.016)	0.188	0.322
Follow-up	Asymmetry index	3,248	-0.001 (0.016)	0.927	0.927

B. Reaction-time joint laterality models

Context	n	Mean effect	Asymmetry effect
Cross	3,254	$\beta_{\text{mean}}=0.064$; $p_{\text{mean}}=0.00122$	$\beta_{\text{asym}}=0.006$; $p_{\text{asym}}=0.741$
Follow-up	3,248	$\beta_{\text{mean}}=0.059$; $p_{\text{mean}}=0.000951$	$\beta_{\text{asym}}=0.017$; $p_{\text{asym}}=0.288$

C. Fluid-intelligence single laterality models

Context	Exposure	n	Estimate (SE)	p	FDR
Cross	Right ICA CBF	3,226	0.044 (0.016)	0.00672	0.0403
Cross	Left ICA CBF	3,226	0.041 (0.016)	0.0103	0.0412
Cross	Mean ICA CBF	3,226	0.044 (0.016)	0.00635	0.0403
Cross	Right-left difference	3,226	0.003 (0.014)	0.813	0.983
Cross	Absolute asymmetry	3,226	-0.011 (0.014)	0.431	0.983
Cross	Asymmetry index	3,226	-0.001 (0.014)	0.944	0.983
Follow-up	Right ICA CBF	943	0.004 (0.028)	0.873	0.983
Follow-up	Left ICA CBF	943	-0.001 (0.028)	0.983	0.983
Follow-up	Mean ICA CBF	943	0.002 (0.028)	0.942	0.983
Follow-up	Right-left difference	943	0.008 (0.024)	0.728	0.983
Follow-up	Absolute asymmetry	943	0.005 (0.025)	0.85	0.983
Follow-up	Asymmetry index	943	0.033 (0.023)	0.158	0.475

D. Fluid-intelligence joint laterality models

Context	n	Mean effect	Asymmetry effect
Cross	3,226	$\beta_{\text{mean}}=0.044$; $p_{\text{mean}}=0.00855$	$\beta_{\text{asym}}=-0.004$; $p_{\text{asym}}=0.766$
Follow-up	943	$\beta_{\text{mean}}=0.003$; $p_{\text{mean}}=0.919$	$\beta_{\text{asym}}=0.005$; $p_{\text{asym}}=0.84$

Cross and follow-up refer to contemporaneous imaging-visit models and baseline-adjusted follow-up models, respectively.