**Supplementary Table 1. Image acquisition parameters.**

|  |  |  |  |
| --- | --- | --- | --- |
| Study | Sequence | Scanners | Protocol parameters |
| COBRE | T1 | 3T Siemens Trio | Coronal T1-weighted structural images were acquired with a 12-channel head-coil and a five-echo MPRAGE sequence (TE = 1.64, 3.5, 5.36, 7.22, and 9.08 ms; TR = 2.53 s; TI = 1.2 s, flip angle = 7°; number of excitations = 1; slice thickness = 1 mm; field of view = 256 mm; resolution = 256 × 256). |
| COBRE | DWI | 3T Siemens Trio | Diffusion weighted images were acquired with a voxel size of 2.0 × 2.0 × 2.0 mm (TR = 9000 ms; TE = 84 ms; B values of 0 and 800; bandwidth = 1562; 72 slices and 35 directions). |
| NMorphCH | T1 | 3T Siemens Trio | Coronal T1-weighted structural images were acquired with a 32-channel head coil and a MPRAGE sequence (TR = 2400 ms, TE = 3.16 ms, flip = 8°, 256 × 256 matrix, 176 slices, slice thickness = 1 mm). |
| NMorphCH | DWI | 3T Siemens Trio | Diffusion weighted images were acquired with a slice thickness of 2 mm (TR = 8000 ms, TE = 86 ms, B values of 0 and 800; flip = 90°, 896 × 896 matrix, 35 slices and 30 directions). |
| UCLA | T1 | 3T Siemens Trio | The scan parameters for the T1-weighted high-resolution anatomical scan (MPRAGE) were as follows: slice thickness, 1 mm; 176 slices; repetition time, 1900 ms; TE, 2.26 ms; matrix, 256 × 256; and FOV, 250 × 250 mm. |
| UCLA | DWI | 3T Siemens Trio | The parameters for the DWI were as follows: slice thickness, 2 mm; 64 directions; TR/TE, 9000/93 ms; flip angle, 90°; matrix, 96 × 96; axial slices, b = 0 and 1000 s/mm2. |

COBRE: Center of Biomedical Research Excellence, NMorphCH: Neuromorphometry by Computer Algorithm Chicago, UCLA: University of California Los Angeles Consortium for Neuropsychiatric Phenomic LA5c Studyears, DWI: diffusion weighted imaging.

**Supplementary Table 2. Statistics of the matching procedure.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Site | *t/χ2* | *df* | *p* |
|  | UCLA | COBRE |  |  |  |
| Number of subjects | 20 | 20 |  |  |  |
| Age, years, mean (SD) | 29.0 (7.4) | 29.0 (7.5) | 0.000 | 38 | 1.000 |
| Sex, male (%) | 8 (40) | 8 (40) | 0.000 | 1 | 1.000 |
| Handedness | 20 R | 20 R |  |  |  |
|  |  |  |  |  |  |
| Variable | Site | *t/χ2* | *df* | *p* |
|  | UCLA | NMorphCH |  |  |  |
| Number of subjects | 20 | 20 |  |  |  |
| Age, years, mean (SD) | 31.5 (9.2) | 31.5 (9.3) | 0.000 | 38 | 1.000 |
| Sex, male (%) | 10 (50) | 10 (50) | 0.000 | 1 | 1.000 |
| Handedness | 20 R | 20 R |  |  |  |

COBRE: Center of Biomedical Research Excellence, NMorphCH: Neuromorphometry by Computer Algorithm Chicago, UCLA: University of California Los Angeles Consortium for Neuropsychiatric Phenomic LA5c Studyears, SD: standard deviation.

**Supplementary Table 3. Group-by-side interaction effects of the mean fractional anisotropy of white matter tracts in both hemispheres in the brain\*.**

|  |  |  |  |
| --- | --- | --- | --- |
| Structure | Left | Right |  |
| HC | SZ | HC | SZ | p |
| AF | 571.03 (93.54) | 536.11 (93.52) | 557.63 (77.01) | 530.99 (81.94) | 0.477 |
| CB | 503.29 (58.4) | 486.59 (60.83) | 498.06 (62.8) | 473.38 (62.02) | 0.280 |
| CR-F | 594.28 (58.06) | 584.68 (58.76) | 591.48 (61.42) | 582.07 (58.26) | 0.858 |
| CR-P | 613.25 (52.56) | 598.59 (60.18) | 620.72 (53.34) | 607.15 (61.44) | 0.762 |
| CST | 598.79 (62.12) | 588.28 (59.67) | 599.14 (62.76) | 587.36 (61.31) | 0.961 |
| EC | 577.81 (66.5) | 552.24 (70.77) | 579.31 (64.9) | 555.2 (68.49) | 0.917 |
| EmC | 563.4 (74.22) | 534.05 (78.68) | 566.54 (77.14) | 534.01 (77.98) | 0.744 |
| ICP | 463.2 (62.56) | 454.53 (65.84) | 463.25 (67.16) | 449.3 (64.86) | 0.371 |
| ILF | 515.46 (68.9) | 487.87 (70.51) | 518.67 (68.72) | 495.29 (72.75) | 0.636 |
| Intra-CBLM-I&P | 378.02 (42.59) | 381.57 (40.94) | 380.69 (41.04) | 380.93 (41.19) | 0.837 |
| Intra-CBLM-PaT | 260.9 (30.8) | 253.92 (32.01) | 266 (29.13) | 260.36 (33.52) | 0.652 |
| IOFF | 595.56 (92.51) | 556.95 (95.66) | 599.61 (97.17) | 563.52 (91.46) | 0.940 |
| MdLF | 543.66 (55.83) | 527.94 (58.37) | 548.51 (56.58) | 534.42 (58.61) | 0.692 |
| PLIC | 559.26 (49.07) | 551.58 (55.51) | 565.55 (48.67) | 554.75 (54.34) | 0.416 |
| SF | 473.27 (45.04) | 459.5 (48.05) | 467.92 (44.59) | 453.28 (46.36) | 0.916 |
| SLF-I | 484.17 (49) | 476.11 (53.82) | 485.05 (47.76) | 475.17 (53.33) | 0.951 |
| SLF-II | 534.47 (76.98) | 502.98 (79.55) | 545.56 (73.64) | 511.28 (78.82) | 0.784 |
| SLF-III | 524.76 (80.75) | 491.67 (83.66) | 535.82 (81.29) | 502.03 (82.8) | 0.788 |
| SO | 546.63 (64.84) | 539.15 (68) | 554.7 (59.79) | 542.7 (67.04) | 0.779 |
| SP | 527.15 (49.91) | 518.79 (57.55) | 530.86 (50.37) | 523.5 (56.25) | 0.880 |
| Sup-F | 489.38 (46.64) | 476.06 (49.77) | 486.75 (46.43) | 473.97 (48.93) | 0.875 |
| Sup-FP | 487.73 (54.73) | 473.83 (58.88) | 489.34 (54.02) | 473.75 (57.02) | 0.920 |
| Sup-O | 402.64 (48.64) | 389.16 (47.72) | 425.9 (58.41) | 405.78 (58.15) | 0.255 |
| Sup-OT | 500.5 (50.68) | 491.95 (52.84) | 512.59 (54.44) | 500.04 (55.66) | 0.389 |
| Sup-P | 482.25 (49.51) | 466.43 (52.68) | 487.83 (49.94) | 473.64 (53.58) | 0.518 |
| Sup-PO | 446.37 (44.37) | 438 (47.55) | 472.73 (49.62) | 460.97 (50.07) | 0.657 |
| Sup-PT | 498.12 (51.4) | 485.54 (55.12) | 501.83 (53.93) | 492.24 (55.3) | 0.766 |
| Sup-T | 438.03 (42.7) | 426.69 (44.61) | 438.46 (43.59) | 423.34 (44.83) | 0.521 |
| TF | 508.83 (51.44) | 494.55 (53.23) | 508.45 (50.97) | 492.23 (51.9) | 0.724 |
| TO | 539.68 (60.61) | 521.29 (64.38) | 550.2 (60.81) | 531.28 (64.99) | 0.957 |
| TP | 514.85 (48.53) | 503.79 (52.76) | 524.39 (47.47) | 511.26 (51.75) | 0.657 |
| UF | 474.2 (52.06) | 463.22 (54.67) | 475.2 (51.13) | 470.2 (51.55) | 0.599 |

\* The mean fractional anisotropy value is presented as x10-3.

AF: arcuate fasciculus, CB: cingulum bundle, CR-F: corona-radiata-frontal, CR-P: corona-radiata-parietal, CST: corticospinal tract, EC: external capsule, EmC: extreme capsule, ICP: inferior cerebellar peduncle, ILF: inferior longitudinal fasciculus, Intra-CBLM-I&P: intracerebellar input and Purkinje tract, Intra-CBLM-PaT: intracerebellar parallel tract, IOFF: inferior occipitofrontal fasciculus, MdLF: middle longitudinal fasciculus, PLIC: posterior limb of internal capsule, SF: striato-frontal, SLF: superior longitudinal fasciculus, SO: striato-occipital, SP: striato-parietal, Sup-F: superficial-frontal, Sup-FP: superficial-frontal-parietal, Sup-O: superficial-occipital, Sup-P: superficial-parietal, Sup-PO: superficial-parietal-occipital, Sup-PT: superficial-parietal-temporal, Sup-T: superficial-temporal, TF: thalamo-frontal, TO: thalamo-occipital, TP: thalamo-parietal, UF: uncinate fasciculus.