**Supplementary Materials**

**Table S1.** Proportion of invalid volumes and mean framewise displacement in two groups

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | FES (n=84) | HC (n=93) | t | p |
| Proportion of invalid volumes, mean (s.d.) | 0.07 (0.08) | 0.07 (0.05) | 0.098 | 0.922 |
| Framewise displacement, mean (s.d.) | 0.13 (0.09) | 0.14 (0.05) | -0.877 | 0.382 |

**Table S2.** ROIs chosen from the Human Brainnetome Atlas (86 ROIs in total).

|  |  |  |
| --- | --- | --- |
| **Lobe**  | **Gyrus** | **ROIs** |
| Fronto Lobe | SFG, Superior frontal gyrus | A8m\_l, A8m\_r, A8dl\_l, A8dl\_r, A9l\_l, A9l\_r, A6dl\_l, A6dl\_r, A6m\_l, A6m\_r, A9m\_l, A9m\_r, A10m\_l, A10m\_r |
|  | MFG, Middle frontal gyrus | A9/46d\_l, A9/46d\_r, IFJ\_l, IFJ\_r, A46\_l, A46\_r, A9/46v\_l, A9/46v\_r, A8vl\_l, A8vl\_r, A6vl\_l, A6vl\_r, A10l\_l, A10l\_r |
|  | IFG, Inferior frontal gyrus | A44d\_l, A44d\_r, IFS\_l, IFS\_r, A45c\_l, A45c\_r, A45r\_l, A45r\_r, A44op\_l, A44op\_r, A44v\_l, A44v\_r |
|  | OrG, Orbital frontal gyrus | A14m\_l, A14m\_r, A12/47o\_l, A12/47o\_r, A11l\_l, A11l\_r, A11m\_l, A11m\_r, A13\_l, A13\_r, A12/47l\_l, A12/47l\_r |
| Temporal Lobe | STG, Superior temporal gyrus | A38m\_l, A38m\_r, A41/42\_l, A41/42\_r, TE1.0/1.2\_l, TE1.0/1.2\_r, A22c\_l, A22c\_r, A38l\_l, A38l\_r, A22r\_l, A22r\_r |
|  | MTG, Middle temporal gyrus | A21c\_l, A21c\_r, A21r\_l, A21\_r, A37dl\_l, A37dl\_r, aSTS\_l, aSTS\_r  |
|  | ITG, Inferior temporal gyrus | A20iv\_l, A20iv\_r, A37elv\_l, A37elv\_r, A20r\_l, A20r\_r, A20il\_l, A20il\_r, A37vl\_l, A37vl\_r, A20cl\_l, A20cl\_r, A20cv\_l, A20cv\_r |

**Table S3.** The associations between SzPRS-related FA/FC and PANSS scores.

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| --- | --- | --- | --- | --- |
|  | **Region** | **PANSS positive score** | **PANSS negative score** | **PANSS general score** |
|  **FA** | Genu of CC | R=0.101 P=0.361 | R=-0.063 P=0.571 | R=-0.022 P=0.844 |
| Body of CC | R=0.054 P=0.625 | **R=-0.185 P=0.091** | R=0.038 P=0.732 |
| Right ACR | R=0.173 P=0.116 | R=-0.164 P=0.136 | R=-0.012 P=0.916 |
| Right SCR | **R=0.186 P=0.090** | R=-0.154 P=0.162 | R=0.139 P=0.206 |
|  **FC** | IFS\_L - A20iv\_L | R=0.005 P=0.963 | R=0.131 P=0.237 | **R=0.205 P=0.062** |
| IFS\_R - A20iv\_L | R=0.106 P=0.341 | R=-0.035 P=0.752 | **R=0.317 P=0.004** |
| IFS\_R – IFJ\_L | R=0.045 P=0.688 | R=0.204 P=0.064 | R=0.176 P=0.111 |
| IFS\_R – IFJ\_R | R=-0.080 P=0.474 | R=0.097 P=0.384 | R=0.109 P=0.328 |

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**Figure S1. Association between SzPRS-related FA/FC and PANSS scores in FES group.**

FA in right superior corona radiata showed marginally correlation with PANSS positive score, while FA in the body of corpus callosum showed marginally correlation with PANSS negative score. FC between the right IFG - left intermediate ventral ITG was found significantly associated with PANSS general score, FC left IFG - left intermediate ventral ITG also showed marginal correlation with PANSS general score.