**Neural correlations between executive function and social function in autism spectrum disorder: a mediation analysis of fMRI**

Table S1. Sequence parameters of resting-state fMRI of the included datasets (*n* = 186 participants, *n* = 5 datasets).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dataset | FA (°) | TE (ms) | TR (ms) | PE | SA | Gap (%) | Nacq | TA (min:sec) |
| GU | 90 | 30 | 2,000 | AP | IA | 20 | 154 | 5:14 |
| KKI | 75 | 30 | 2,500 | AP | A | 0 | 156 | 6:40 |
| NYU\_1 | 90 | 15 | 2,000 | RL | IA | 0 | 180 | 6:00 |
| NYU\_2 | 82 | 30 | 2,000 | RL | IA | 0 | 180 | 6:00 |
| SDSU | 90 | 30 | 2,000 | AP | IA | 0 | 180 | 6:10 |

GU, Georgetown University; KKI, Kennedy Krieger Institute; NYU\_1, New York University Langone Medical Center, Sample 1; NYU\_2, New York University Langone Medical Center, Sample 2; SDSU, San Diego State University; FA, flip angle; TE, echo time; TR, repetition time; PE, phase encoding; AP, anterior to posterior; RL, right to left; SA, slice acquisition order; IA, interleaved ascending; A, ascending; Gap, gap between slices; Nacq, number of volumes collected; TA, acquisition time.

Fig. S1. Mediation analysis of overlapped FC links on the effect of EF on social function in ASD subjects.



Note: A. Mediation model for the mediation of the FC between left putamen and right superior frontal gyrus on the correlation between EF and social function in ASD individuals. B. Mediation model for the mediation of the FC between left caudate and right supramarginal gyrus on the correlation between EF and social function in ASD individuals. C. Mediation model for the mediation of the FC between right putamen and left gyrus rectus on the correlation between EF and social function in ASD individuals. D. Mediation model for the mediation of the FC between right putamen and left paracentral lobule on the correlation between EF and social function in ASD individuals.

SRS: Social Responsiveness Scale; BRIEF: Behavior Rating Inventory of Executive Function; eff: effect; SE: standard error; CI: confidence interval.