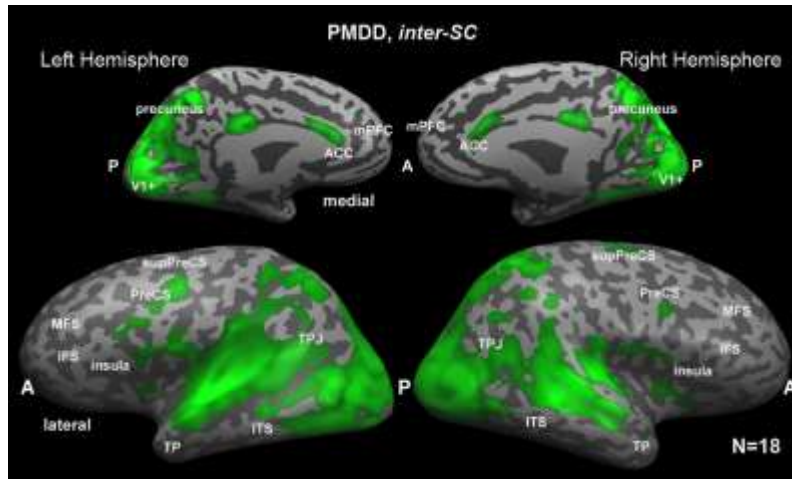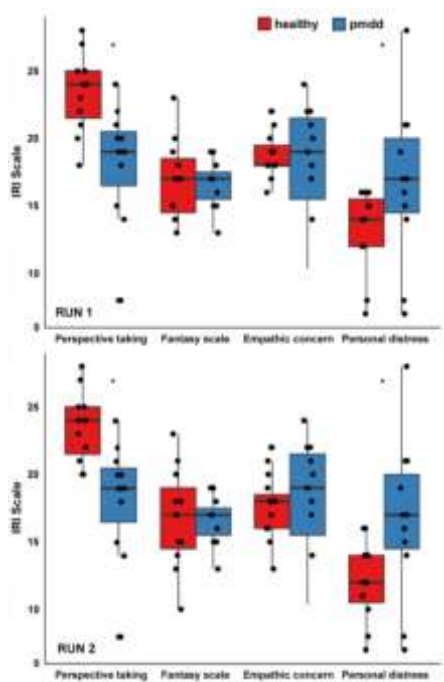## Results for the patient subgroup <u>without</u> pharmacological treatment

1.   Inter-SC analysis (N = 18)

Figure S1. The inter-SC analysis was repeated on the subgroup of 18 patients who participated in the fMRI task and who did not receive pharmacological treatment for their psychiatric symptoms. The obtained maps were very close to the maps for all patients. Moreover, a direct comparison between the maps did not reveal any significant findings.

2.   **Figure S2.** We have compared the results of IRI for the patient group that did not receive pharmacological treatment with the initial group. To make the groups comparable we randomly excluded six participants from the healthy group and repeated the test twice. The findings are very similar to the outcomes found initially.

3. Clinical characteristics

PMTS-OR	Depression	Anxiety	Lability	Anger	Total
	3.5 ± 0.6	3.2 ± 0.7	3.4 ± 0.8	3.1 ± 0.6	31.7 ± 4.2

BFI	Extraversion	Neuroticism	Agreeableness	Conscientiousness	Openness to experience
	25.5 ± 6.0	26.3 ± 5.2	34.1 ± 3.9	31.0 ± 4.5	38.3 ± 5.8

CGI-S	5.1 ± 0.3

4. NCI analysis

Figure S3. In the NCI analysis, the statistical results obtained for the ToM-related network did not change after the removal of individuals with PMDD who were treated with medicines.