

Table 1. Baseline demographics and medication history across participant groups.

Characteristic	CON, N = 27 ¹	BP, N = 21 ¹	SCZ, N = 21 ¹	p-value ²
Age	25.56 (3.3)	27.00 (3.6)	26.71 (4.1)	0.3
Gender				0.076
Female	16 (59.3%)	17 (81.0%)	10 (47.6%)	
Male	11 (40.7%)	4 (19.0%)	11 (52.4%)	
BMI	26.47 (6.6)	29.96 (7.4)	29.69 (7.8)	0.15
BMI group				
Underweight	1 (3.7%)	1 (4.8%)	1 (4.8%)	
Healthy	12 (44.4%)	4 (19.0%)	5 (23.8%)	
Overweight	7 (25.9%)	7 (33.3%)	6 (28.6%)	
Obese	7 (25.9%)	9 (42.9%)	9 (42.9%)	
Anti-psychotic medications				
Typical neuroleptics	0	0	3 (14.3%)	
Atypical neuroleptics	0	5 (23.8%)	10 (47.6%)	
Mood stabilizers				
Lithium	0	0	2 (9.5%)	
Anti-convulsant	0	6 (28.6%)	2 (9.5%)	
Both	0	2 (9.5%)	0	
Anti-depressants				
SSRI/SNRI	1 (3.7%)	1 (4.8%)	6 (28.6%)	
Atypical	0	2 (9.5%)	2 (9.5%)	
Both	0	0	1 (4.8%)	
Other/No medications				
Other ³	0	3 (14.3%)	3 (14.3%)	
None ⁴	26 (96.3%)	10 (47.6%)	7 (33.3%)	

¹ Mean (SD); N (%)

² Kruskal-Wallis rank sum test; Pearson's Chi-squared test

³ Participants with active benzodiazepines, anticholinergics, and beta-blockers.

⁴ Participants with no active medication at all during the time of assessment.

Table 2: Summary of changes in DTI and DBSI measures across WM tracts and disease group (Health Control=HC, Schizophrenia=SCZ, Bipolar disorder=BPD). ↑ denotes significant increase. ↓ denotes significant decrease and – denotes no statistically significant change. R denotes significant change in right hemisphere only, L denotes significant change in left hemisphere only, and arrow without R or L denotes change in both hemisphere.

Diffusion parameter	DTI FA		DTI RD		DTI AD		Cellular diffusion fraction		Axonal fiber fraction		Extra-axonal water fraction		Fiber radial diffusivity		Fiber axial diffusivity	
Group comparison WM tracts	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD	HC vs. SCZ	HC vs. BPD
Anterior thalamic radiation	↓	↓ (L)	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Cingulum (cingulate gyrus)	↓	↓	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Cingulum (hippocampus)	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Corticospinal tract	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Forceps major	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Forceps minor	↓	↓	--	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Inferior fronto-occipital fasciculus	↓	↓ (L)	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Inferior longitudinal fasciculus	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑ (R)	--	--
Superior longitudinal fasciculus (temporal part)	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Superior longitudinal fasciculus	↓	--	↑	--	--	--	↑	--	↓	--	↑	↑	↑	↑	--	--
Uncinate fasciculus	↓	↓ (L)	--	--	--	--	↑	--	↓	--	↑	↑	↑	↑ (L)	--	--