functioning. We hypothesized that GM volumetric differences are associated with both familial and clinical risk for schizophrenia.

**Methods:** We processed the T1-weighted MRI scans acquired at 3 Tesla of 544 HC, 63 SIB, 20 CHR and 120 SCZ using CAT12. We used ANCOVA to assess group differences (HC vs. CHR vs. SIB vs. SCZ), with linear and quadratic age, gender and total intracranial volume as nuisance covariates. We assessed the reproducibility of our case/control findings in an independent sample of 127 HC and 36 SCZ. Group differences were tested post hoc through Fisher’s test.

**Results:** We found significant group effects in the bilateral thalamus, bilateral hippocampus and anterior cingulate (FWE<0.05). Specifically, SCZ presented the lowest GM volume in these regions compared to the other three groups, with SIB and CHR’s GM estimates intermediate between HC and SCZ (p<0.05). The associations with schizophrenia were replicated in the independent validation sample.

**Discussion:** Individuals with familial or clinical risk for schizophrenia have lower GM estimates in the same brain regions. These findings, suggest that these structural features are not only associated with familial risk for schizophrenia but that they are also associated with its sub-threshold symptoms.

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**S160. ALTERATIONS IN SHORT-RANGE STRUCTURAL CONNECTIVITY ACROSS THE PSYCHOSIS SPECTRUM: FINDINGS FROM THE B-SNIP STUDY**

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**Background:** Schizophrenia (SZ) and bipolar disorder (BD) have been increasingly viewed as psychotic mood disorders along a shared spectrum. Long-range and short-range structural connectivity have been implicated in both disorders, conceptualising them as “disconnection syndromes”. There has been a rise in neuroimaging tools to understand the overlap and boundaries between the two disorders, which has shifted our focus towards appreciating traits in addition to diagnosis. Our recent pilot study examining short-range U-fibers found in superficial white matter (SWM) found shared and distinct traits among people with SZ and BD and we aimed to investigate SWM further using data from the Bipolar-Schizophrenia Network on Intermediate Phenotypes (B-SNIP) consortium.

**Methods:** Using diffusion weighted imaging (DWI), we performed whole brain tractography in 113 people with SZ, 69 people with SA disorder, 49 people with psychotic BD and 77 healthy controls using BrainVISA and Connectomist 2.0. Segmentation and labelling of SWM tracts were performed using a comprehensive U-fiber atlas. ComBat was applied to remove site effects and principle components analysis was performed to identify networks of bundles used for comparative analyses.

**Results:** Principle component analysis revealed a network comprised of 8 short tracts in frontal, parietal, and temporal regions that had decreased anatomical connectivity in patients, regardless of diagnosis, relative to healthy controls. This network overlaps, in part, regions that differ between patients (SZ and BD) and healthy controls in our recent pilot study. However, we were unable to detect differences between people with SZ, SA disorder and psychotic BD.

**Discussion:** We demonstrate that short U-fibers are likely vulnerable to pathological processes in psychotic illnesses, encouraging further understanding of their anatomy and function. Our lack of findings between patient groups may reflect a more homogeneous population (three subgroups of psychosis) and may suggest that abnormalities in SWM are less likely to due mood disturbances.