

## Supplementary Material

Captions:

Fig. S1: The group-level spatial maps of 14 RSNs for HC, SCP and DCP. SMN: sensorimotor network; DAN: dorsal attention network; antDMN: the anterior part of default mode network; postDMN: the posterior part of default mode network; SRN: the self-referential network; primVN: the primary visual network; extraVN: the extra-striate visual network; AN: the auditory network; LFPN: the left lateral frontoparietal network; RFPN: the right lateral frontoparietal network; SN: the salience network; CEN: the central executive network.

Fig. S2: Group comparison results of RSNs with different independent components when conducting ICA processing. The figures were achieved by performing one-way ANOVA on the RSN maps of the three groups, with a threshold of  $P < 0.0005$ . The bar maps present the between-groups differences in the peak regions showing significant group difference in ANOVA ( $P < 0.01$ ). The tables showed the corresponding significant differences of functional connectivity within RSNs in one-way ANOVA comparison (ANOVA,  $P < 0.0005$ ).

Fig. S3: Group comparison results of FNC with different independent components when conducting ICA processing. The black line in the ANOVA result represents the altered connections among three groups ( $P < 0.05$ , FDR-corrected). Then, differences of functional network connectivity between any two groups by performing hoc post test were shown ( $P < 0.05$ ). The blue solid line represents the connection with decreased positive FNC in CP children; and the blue dotted line represents the connection with decreased negative FNC in CP children.

Fig. S4: Relationships between RSN/FNC and clinical scores in subgroups. (A) Relationship between cerebellum network and GMFCS scores. (B) Relationship between primVN-extraVN, postDMN-SN, antDMN-SRN connection and GMFCS scores. (C) Relationship between primVN-RFPN, RFPN-cerebellum, antDMN-SRN connection and ADL scores.

Fig. S1

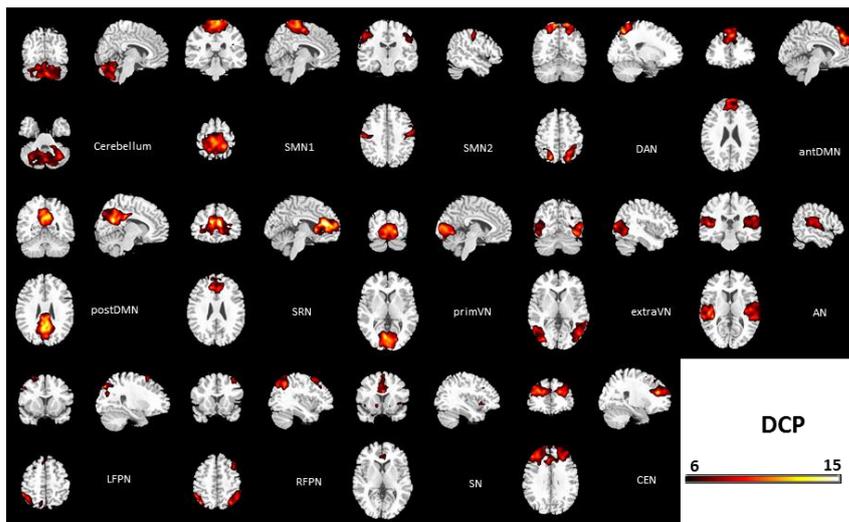
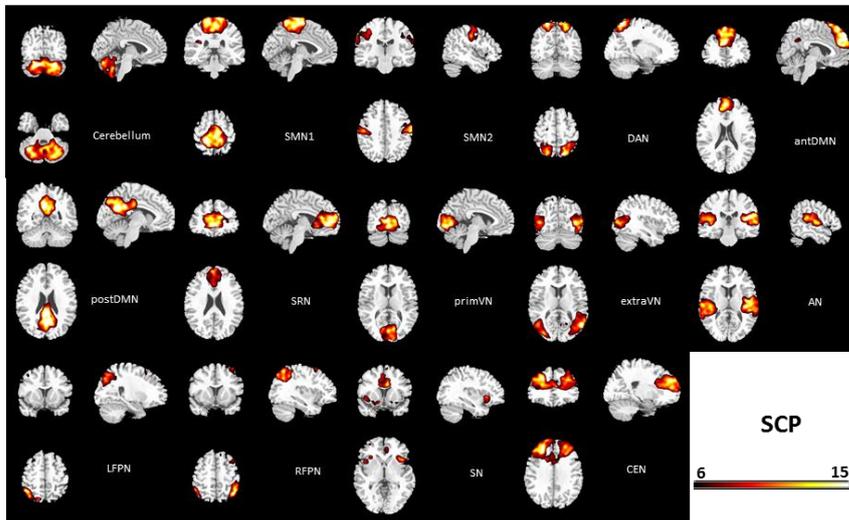
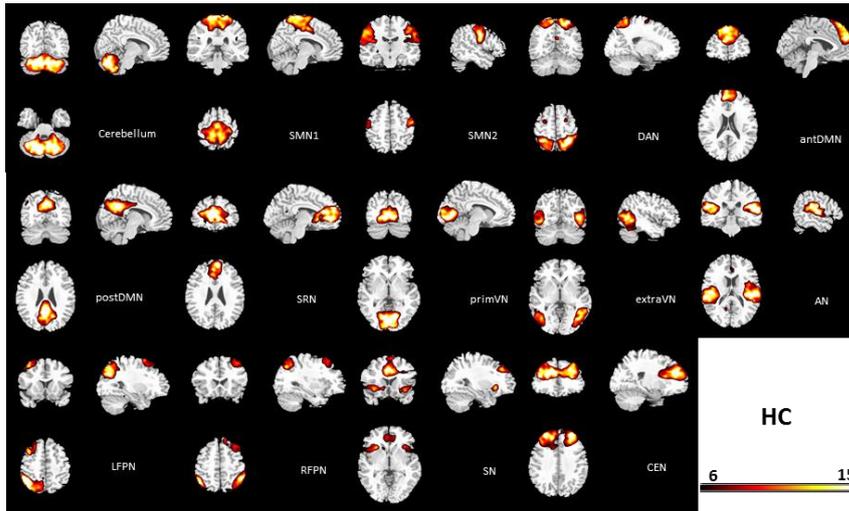
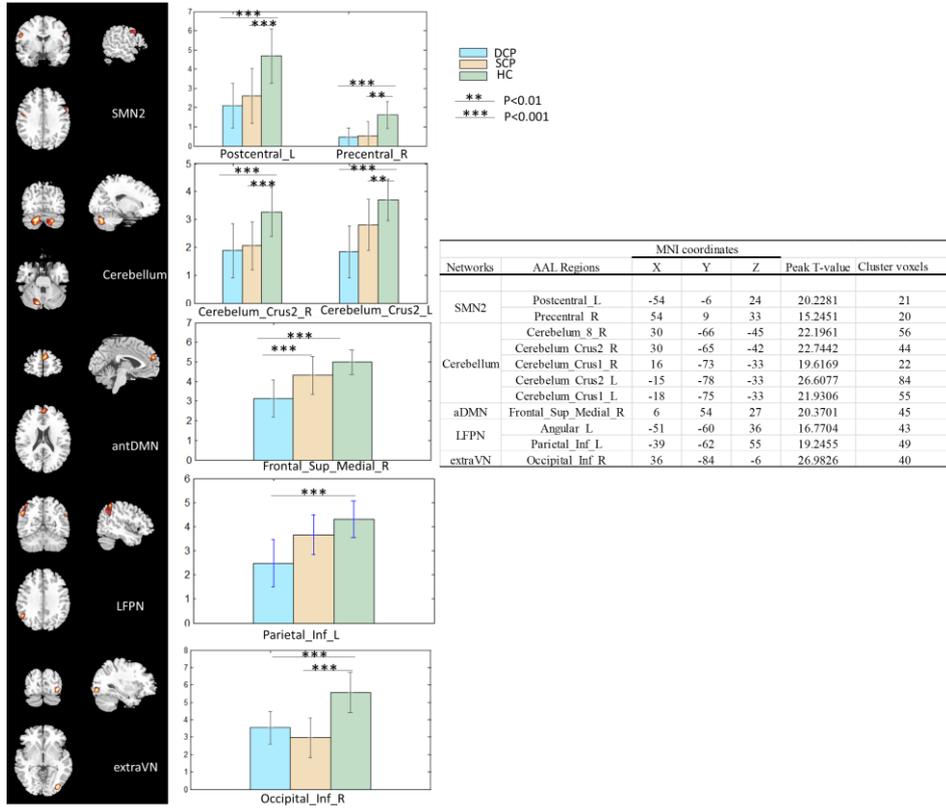
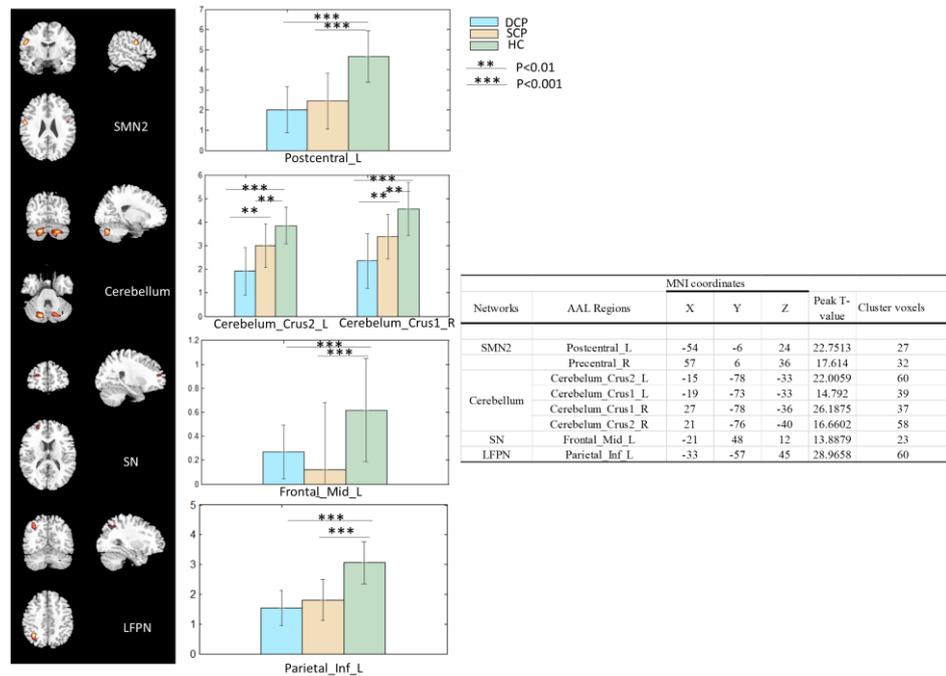


Fig. S2

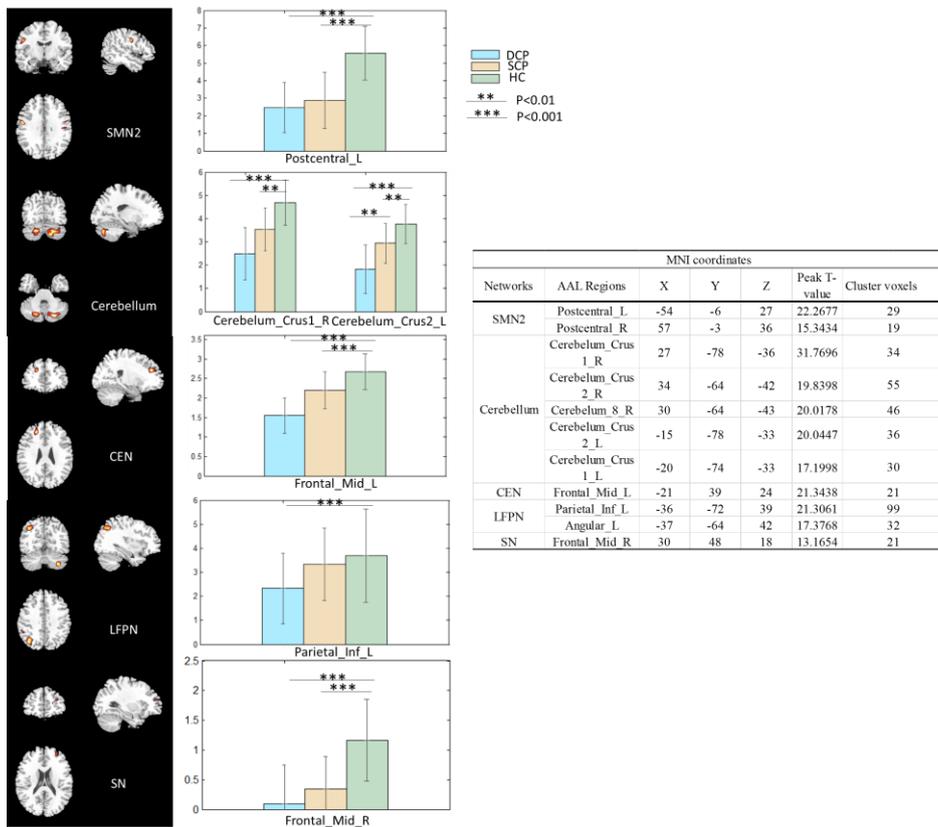
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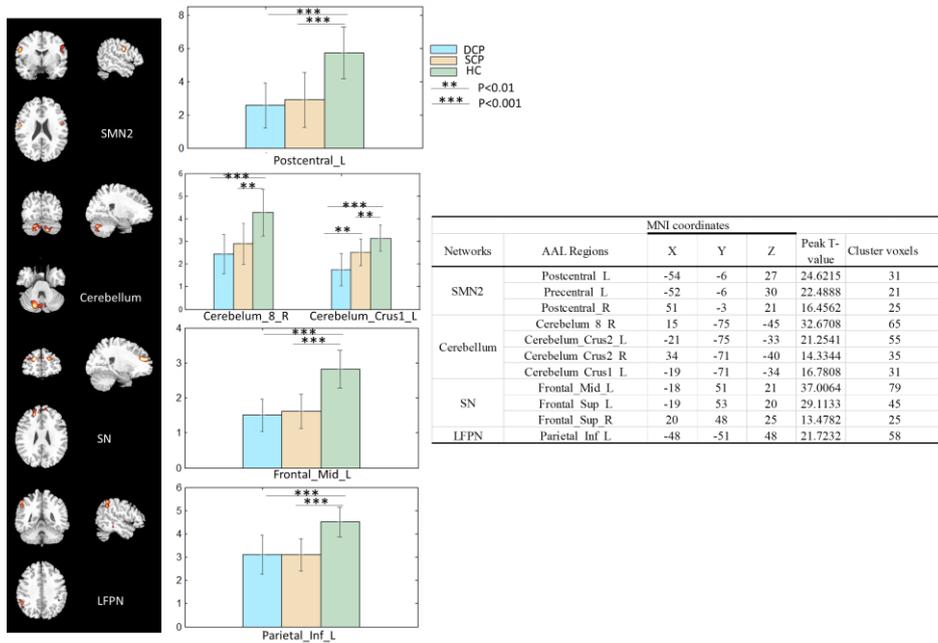
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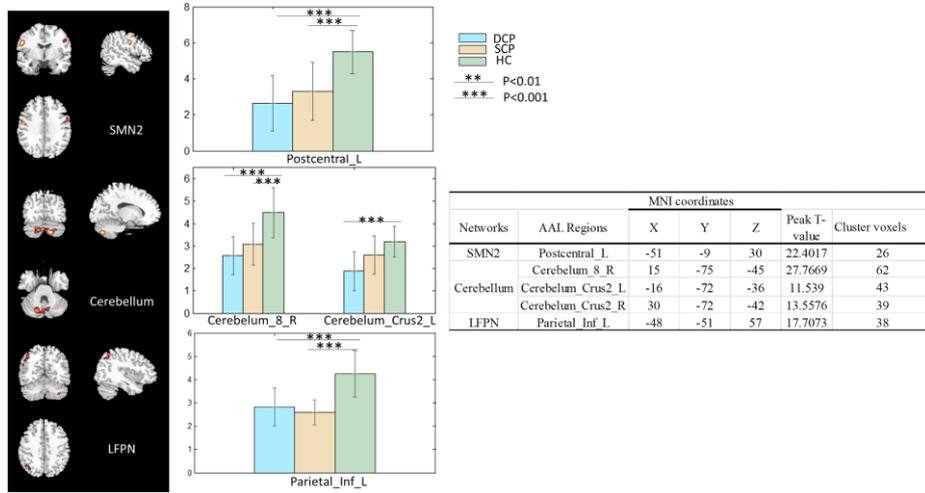
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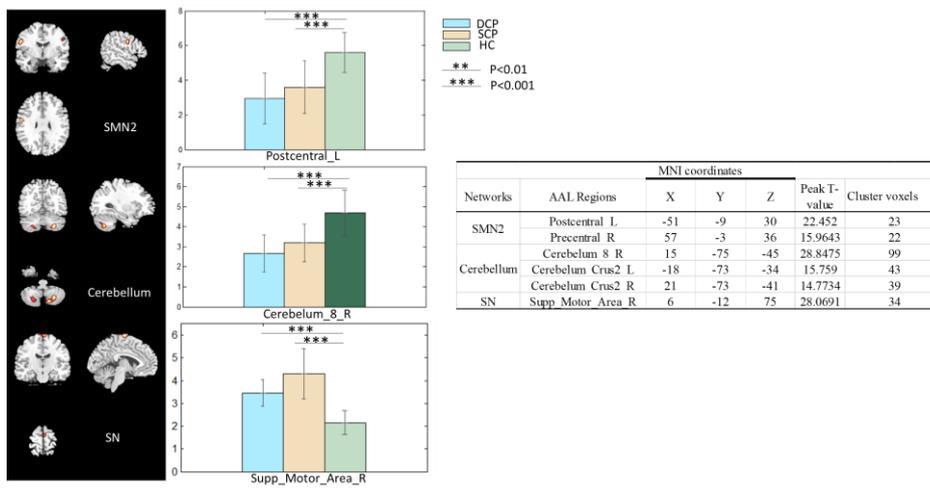
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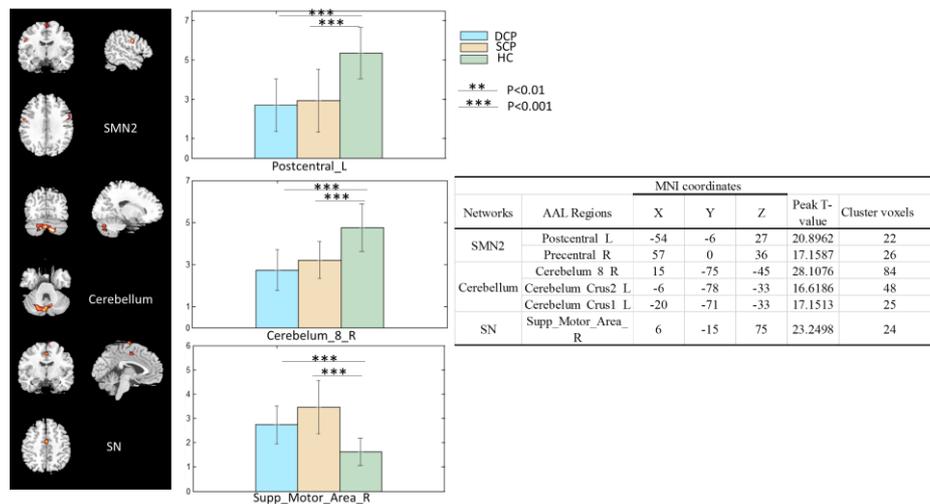




Fig. S4

