Supplementary table1 Brain Regions Differentiating SSD Subtypes and Healthy Controls: a two-sample test.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Rank | Region | Hemisphere | Cluster size Voxels | MNI 152 template | | | Effect Size |
| X | Y | Z |
| Brain Region Differences Between SSD Somatic Subtype and Control | | | | | | | |
| 1 | Dorsal ACC | R | 57 | 4 | 37 | 33 | 0.582 |
| 2 | Ventral ACC | L | 34 | -3 | 28 | 36 | 0.542 |
| 3 | Ventral Insula | R | 35 | 46 | 16 | -6 | 0.516 |
| 4 | PMC | R | 44 | 40 | -27 | 68 | 0.458 |
| 5 | Dorsal Insula | L | 37 | -44 | 15 | -4 | 0.451 |
| 6 | Anterior Precuneus | L | 33 | -5 | -68 | -50 | 0.384 |
| 7 | Ventral lPFC | L | 32 | -50 | 50 | -9 | 0.328 |
| 8 | Anterior Precuneus | R | 27 | 4 | -64 | 36 | 0.303 |
| Brain Region Differences Between SSD Negative Event Subtype and Control | | | | | | | |
| 1 | DLPFC | R | 60 | 44 | 46 | 29 | 0.537 |
| 2 | Dorsal Insula | L | 39 | -44 | 16 | -2 | 0.483 |
| 3 | Ventral Insula | R | 35 | 44 | 17 | -6 | 0.421 |
| 4 | DLPFC | L | 26 | -34 | 52 | 34 | 0.411 |
| 5 | Medial Cuneus | L | 35 | -4 | -77 | 17 | 0.353 |
| 6 | Medial Cuneus | R | 58 | 5 | -68 | 12 | 0.331 |
| 7 | OTJ | L | 32 | -56 | -70 | 10 | 0.312 |
| Brain Region Differences Between SSD Emotional Subtype and Control | | | | | | | |
| 1 | Thalamus | R | 38 | 4 | -26 | 6 | 0.597 |
| 2 | Thalamus | L | 38 | -3 | -20 | 5 | 0.591 |
| 3 | Dorsal Insula | L | 37 | -57 | 17 | 2 | 0.493 |
| 4 | Ventral Insula | R | 31 | 44 | 18 | -6 | 0.438 |
| 5 | PCC | L | 52 | -5 | -46 | 36 | 0.412 |
| 6 | OTJ | L | 36 | -56 | -69 | 19 | 0.404 |
| 7 | PCC | R | 41 | 4 | -58 | 16 | 0.333 |
| 8 | OTJ | R | 28 | 58 | -68 | 1 | 0.312 |

vlPFC: ventrolateral prefrontal cortex; ACC: Anterior Cingulate Cortex; PMC: Premotor cortex; DLPFC: Dorsolateral Prefrontal Cortex; OTJ: Occipitotemporal junction; PCC: Posterior Cingulate Cortex.

Supplementary table 2: Demographic and clinical characteristics of participants in the model development and external validation cohorts

|  |  |  |
| --- | --- | --- |
| Baseline Characteristics | Internal cohort (n = 1419) | External cohort (n = 530) |
| Age | 48.12 (15.71) | 52.24 (16.12) |
| Gender (n, %) | Male: 562 (39.6%)  Female: 857 (60.4%) | Male: 210 (39.6%)  Female: 320 (60.4%) |
| Neuro-11 | 13.02 (5.3) | 12.74 (4.6) |
| Somatic | 7.97 (3.55) | 7.65 (3.17) |
| Emotional | 1.9 (1.53) | 1.54 (1.38) |
| Event | 3.15 (1.96) | 3.55 (1.8) |
| HAMD | 13. 87 (8. 97) | 13.43 (8.38) |
| HAMA | 11. 70 (6. 99) | 11.36 (6.44) |
| PSQI | 10. 52 (4. 99) | 10.12 (4.84) |

Values are mean (SD). The internal cohort (n = 1419) was used for model training and cross-validation, while the external cohort (n = 530) was reserved for independent validation.