**Table S1**. The edge coefficients for the Depression-Anxiety-Stress cross-sectional network

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node | S1 | S6 | S8 | S11 | S12 | S14 | S18 | A2 | A4 | A7 | A9 | A15 | A19 | A20 | D3 | D5 | D10 | D13 | D16 | D17 | D21 |
| S1 | — | -0.02 | -0.00 | -0.01 | 0.04 | -0.00 | 0.06 | 0.22 | -0.01 | 0.05 | 0.07 | -0.02 | -0.04 | 0.06 | 0.05 | 0.13 | 0.09 | -0.00 | -0.01 | 0.06 | -0.02 |
| S6 | -0.02 | — | 0.10 | 0.01 | 0.10 | 0.01 | 0.06 | 0.06 | 0.09 | 0.19 | 0.10 | -0.04 | 0.01 | 0.02 | 0.12 | 0.19 | 0.05 | 0.04 | 0.02 | -0.02 | -0.06 |
| S8 | -0.00 | 0.10 | — | 0.02 | 0.16 | 0.09 | 0.10 | 0.05 | 0.05 | -0.01 | 0.20 | 0.05 | 0.10 | -0.09 | -0.01 | 0.12 | -0.01 | 0.17 | -0.00 | -0.07 | 0.02 |
| S11 | -0.01 | 0.01 | 0.02 | — | 0.25 | 0.08 | -0.03 | 0.09 | 0.08 | 0.08 | 0.14 | 0.28 | -0.02 | 0.11 | -0.12 | 0.03 | 0.21 | 0.09 | -0.00 | -0.04 | -0.03 |
| S12 | 0.04 | 0.10 | 0.16 | 0.25 | — | 0.14 | 0.01 | -0.07 | 0.03 | -0.06 | -0.05 | 0.03 | 0.03 | 0.09 | 0.18 | -0.03 | 0.08 | 0.15 | 0.02 | -0.08 | 0.05 |
| S14 | -0.00 | 0.01 | 0.09 | 0.08 | 0.14 | — | 0.12 | -0.00 | -0.02 | 0.07 | 0.13 | -0.05 | 0.05 | 0.05 | 0.02 | -0.03 | -0.01 | -0.04 | 0.12 | 0.06 | -0.06 |
| S18 | 0.06 | 0.06 | 0.10 | -0.03 | 0.01 | 0.12 | — | 0.04 | -0.02 | -0.04 | 0.07 | 0.04 | 0.04 | 0.11 | -0.04 | 0.05 | -0.05 | -0.00 | 0.01 | 0.14 | 0.13 |
| A2 | 0.22 | 0.06 | 0.05 | 0.09 | -0.07 | -0.00 | 0.04 | — | 0.16 | -0.04 | 0.02 | 0.03 | 0.06 | -0.05 | 0.14 | 0.07 | 0.09 | -0.01 | 0.01 | 0.00 | -0.11 |
| A4 | -0.01 | 0.09 | 0.05 | 0.08 | 0.03 | -0.02 | -0.02 | 0.16 | — | 0.13 | -0.06 | -0.02 | 0.21 | 0.09 | 0.23 | -0.02 | -0.11 | 0.02 | -0.03 | 0.04 | 0.04 |
| A7 | 0.05 | 0.19 | -0.01 | 0.08 | -0.06 | 0.07 | -0.04 | -0.04 | 0.13 | — | -0.12 | 0.11 | 0.13 | 0.02 | 0.16 | 0.05 | -0.04 | -0.01 | -0.01 | 0.08 | 0.09 |
| A9 | 0.07 | 0.10 | 0.20 | 0.14 | -0.05 | 0.13 | 0.07 | 0.02 | -0.06 | -0.12 | — | 0.03 | 0.05 | -0.00 | -0.04 | 0.14 | 0.05 | 0.07 | 0.04 | -0.07 | -0.05 |
| A15 | -0.02 | -0.04 | 0.05 | 0.28 | 0.03 | -0.05 | 0.04 | 0.03 | -0.02 | 0.11 | 0.03 | — | -0.00 | 0.22 | 0.10 | -0.03 | -0.03 | 0.14 | 0.15 | 0.06 | 0.02 |
| A19 | -0.04 | 0.01 | 0.10 | -0.02 | 0.03 | 0.05 | 0.04 | 0.06 | 0.21 | 0.13 | 0.05 | -0.00 | — | 0.28 | -0.10 | 0.02 | 0.05 | 0.02 | 0.11 | 0.02 | 0.01 |
| A20 | 0.06 | 0.02 | -0.09 | 0.11 | 0.09 | 0.05 | 0.11 | -0.05 | 0.09 | 0.02 | -0.00 | 0.22 | 0.28 | — | -0.01 | -0.05 | -0.01 | 0.14 | -0.10 | 0.04 | 0.10 |
| D3 | 0.05 | 0.12 | -0.01 | -0.12 | 0.18 | 0.02 | -0.04 | 0.14 | 0.23 | 0.16 | -0.04 | 0.10 | -0.10 | -0.01 | — | -0.01 | 0.06 | 0.13 | 0.10 | 0.06 | 0.05 |
| D5 | 0.13 | 0.19 | 0.12 | 0.03 | -0.03 | -0.03 | 0.05 | 0.07 | -0.02 | 0.05 | 0.14 | -0.03 | 0.02 | -0.05 | -0.01 | — | 0.08 | 0.01 | 0.06 | -0.00 | 0.05 |
| D10 | 0.09 | 0.05 | -0.01 | 0.21 | 0.08 | -0.01 | -0.05 | 0.09 | -0.11 | -0.04 | 0.05 | -0.03 | 0.05 | -0.01 | 0.06 | 0.08 | — | -0.00 | 0.10 | 0.05 | 0.24 |
| D13 | -0.00 | 0.04 | 0.17 | 0.09 | 0.15 | -0.04 | -0.00 | -0.01 | 0.02 | -0.01 | 0.07 | 0.14 | 0.02 | 0.14 | 0.13 | 0.01 | -0.00 | — | 0.08 | 0.05 | 0.02 |
| D16 | -0.01 | 0.02 | -0.00 | -0.00 | 0.02 | 0.12 | 0.01 | 0.01 | -0.03 | -0.01 | 0.04 | 0.15 | 0.11 | -0.10 | 0.10 | 0.06 | 0.10 | 0.08 | — | 0.14 | 0.09 |
| D17 | 0.06 | -0.02 | -0.07 | -0.04 | -0.08 | 0.06 | 0.14 | 0.00 | 0.04 | 0.08 | -0.07 | 0.06 | 0.02 | 0.04 | 0.06 | -0.00 | 0.05 | 0.05 | 0.14 | — | 0.39 |
| D21 | -0.02 | -0.06 | 0.02 | -0.03 | 0.05 | -0.06 | 0.13 | -0.11 | 0.04 | 0.09 | -0.05 | 0.02 | 0.01 | 0.10 | 0.05 | 0.05 | 0.24 | 0.02 | 0.09 | 0.39 | — |

**Table S2**. The edge coefficients for the Depression-Anxiety-Stress cross-sectional network (T1)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node | S1 | S6 | S8 | S11 | S12 | S14 | S18 | A2 | A4 | A7 | A9 | A15 | A19 | A20 | D3 | D5 | D10 | D13 | D16 | D17 | D21 |
| S1 | — | 0.05 | 0.06 | 0.02 | 0.05 | 0.03 | -0.01 | 0.15 | -0.09 | 0.04 | -0.06 | -0.00 | -0.01 | 0.07 | 0.07 | 0.15 | 0.11 | -0.03 | 0.05 | 0.09 | -0.06 |
| S6 | 0.05 | — | 0.01 | -0.00 | 0.16 | 0.01 | 0.16 | 0.08 | 0.10 | 0.23 | 0.14 | 0.04 | -0.07 | -0.06 | 0.18 | 0.19 | 0.03 | 0.04 | -0.02 | -0.02 | -0.10 |
| S8 | 0.06 | 0.01 | — | 0.03 | 0.17 | 0.04 | 0.12 | 0.08 | 0.09 | 0.04 | 0.17 | 0.03 | 0.11 | -0.09 | -0.04 | 0.08 | -0.01 | 0.20 | 0.02 | -0.07 | 0.07 |
| S11 | 0.02 | -0.00 | 0.03 | — | 0.22 | 0.05 | 0.00 | 0.08 | 0.01 | 0.10 | 0.19 | 0.22 | -0.00 | 0.08 | -0.14 | 0.00 | 0.16 | 0.07 | 0.05 | 0.00 | -0.06 |
| S12 | 0.05 | 0.16 | 0.17 | 0.22 | — | 0.23 | -0.07 | -0.19 | 0.08 | -0.12 | -0.00 | -0.00 | 0.08 | 0.13 | 0.20 | 0.01 | 0.11 | 0.01 | 0.00 | -0.12 | 0.09 |
| S14 | 0.03 | 0.01 | 0.04 | 0.05 | 0.23 | — | 0.16 | 0.10 | -0.09 | 0.06 | 0.09 | -0.08 | 0.10 | 0.03 | 0.01 | -0.07 | -0.08 | 0.00 | 0.10 | 0.07 | -0.03 |
| S18 | -0.01 | 0.16 | 0.12 | 0.00 | -0.07 | 0.16 | — | -0.03 | -0.06 | 0.03 | 0.03 | 0.09 | 0.03 | 0.13 | -0.06 | 0.00 | -0.01 | 0.07 | -0.02 | 0.13 | 0.05 |
| A2 | 0.15 | 0.08 | 0.08 | 0.08 | -0.19 | 0.10 | -0.03 | — | 0.20 | -0.13 | -0.03 | 0.05 | 0.06 | -0.01 | 0.13 | 0.13 | 0.18 | -0.10 | 0.01 | 0.01 | -0.10 |
| A4 | -0.09 | 0.10 | 0.09 | 0.01 | 0.08 | -0.09 | -0.06 | 0.20 | — | 0.14 | -0.03 | 0.02 | 0.25 | 0.15 | 0.16 | 0.02 | -0.16 | 0.09 | -0.02 | 0.05 | -0.03 |
| A7 | 0.04 | 0.23 | 0.04 | 0.10 | -0.12 | 0.06 | 0.03 | -0.13 | 0.14 | — | -0.15 | 0.09 | 0.11 | -0.00 | 0.24 | 0.10 | -0.01 | -0.07 | -0.01 | 0.01 | 0.05 |
| A9 | -0.06 | 0.14 | 0.17 | 0.19 | -0.00 | 0.09 | 0.03 | -0.03 | -0.03 | -0.15 | — | 0.02 | 0.02 | 0.06 | -0.04 | 0.17 | 0.13 | -0.02 | 0.08 | -0.06 | -0.07 |
| A15 | -0.00 | 0.04 | 0.03 | 0.22 | -0.00 | -0.08 | 0.09 | 0.05 | 0.02 | 0.09 | 0.02 | — | 0.03 | 0.20 | 0.04 | 0.02 | -0.01 | 0.20 | 0.14 | 0.00 | 0.10 |
| A19 | -0.01 | -0.07 | 0.11 | -0.00 | 0.08 | 0.10 | 0.03 | 0.06 | 0.25 | 0.11 | 0.02 | 0.03 | — | 0.24 | -0.08 | -0.04 | 0.08 | -0.03 | 0.07 | 0.09 | -0.01 |
| A20 | 0.07 | -0.06 | -0.09 | 0.08 | 0.13 | 0.03 | 0.13 | -0.01 | 0.15 | -0.00 | 0.06 | 0.20 | 0.24 | — | 0.01 | -0.09 | -0.03 | 0.16 | -0.10 | 0.09 | 0.02 |
| D3 | 0.07 | 0.18 | -0.04 | -0.14 | 0.20 | 0.01 | -0.06 | 0.13 | 0.16 | 0.24 | -0.04 | 0.04 | -0.08 | 0.01 | — | -0.03 | 0.07 | 0.17 | 0.10 | -0.03 | 0.11 |
| D5 | 0.15 | 0.19 | 0.08 | 0.00 | 0.01 | -0.07 | 0.00 | 0.13 | 0.02 | 0.10 | 0.17 | 0.02 | -0.04 | -0.09 | -0.03 | — | 0.00 | 0.05 | -0.03 | -0.03 | 0.14 |
| D10 | 0.11 | 0.03 | -0.01 | 0.16 | 0.11 | -0.08 | -0.01 | 0.18 | -0.16 | -0.01 | 0.13 | -0.01 | 0.08 | -0.03 | 0.07 | 0.00 | — | 0.06 | 0.06 | 0.05 | 0.24 |
| D13 | -0.03 | 0.04 | 0.20 | 0.07 | 0.01 | 0.00 | 0.07 | -0.10 | 0.09 | -0.07 | -0.02 | 0.20 | -0.03 | 0.16 | 0.17 | 0.05 | 0.06 | — | 0.10 | 0.04 | 0.04 |
| D16 | 0.05 | -0.02 | 0.02 | 0.05 | 0.00 | 0.10 | -0.02 | 0.01 | -0.02 | -0.01 | 0.08 | 0.14 | 0.07 | -0.10 | 0.10 | -0.03 | 0.06 | 0.10 | — | 0.14 | 0.07 |
| D17 | 0.09 | -0.02 | -0.07 | 0.00 | -0.12 | 0.07 | 0.13 | 0.01 | 0.05 | 0.01 | -0.06 | 0.00 | 0.09 | 0.09 | -0.03 | -0.03 | 0.05 | 0.04 | 0.14 | — | 0.37 |
| D21 | -0.06 | -0.10 | 0.07 | -0.06 | 0.09 | -0.03 | 0.05 | -0.10 | -0.03 | 0.05 | -0.07 | 0.10 | -0.01 | 0.02 | 0.11 | 0.14 | 0.24 | 0.04 | 0.07 | 0.37 | — |

**Table S3**. The edge coefficients for the Depression-Anxiety-Stress cross-sectional network (T2)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node | S1 | S6 | S8 | S11 | S12 | S14 | S18 | A2 | A4 | A7 | A9 | A15 | A19 | A20 | D3 | D5 | D10 | D13 | D16 | D17 | D21 |
| S1 | — | 0.04 | 0.07 | -0.06 | 0.05 | -0.05 | 0.11 | 0.01 | 0.28 | -0.05 | 0.11 | -0.03 | -0.11 | 0.05 | 0.02 | 0.05 | 0.01 | 0.14 | 0.02 | 0.02 | 0.01 |
| S6 | 0.04 | — | 0.07 | 0.02 | 0.12 | 0.1 | 0.13 | 0.02 | 0.07 | -0.07 | 0.16 | 0.05 | 0.09 | -0.02 | -0.05 | -0.02 | 0.14 | -0.01 | 0.12 | -0.06 | 0.07 |
| S8 | 0.07 | 0.07 | — | 0.10 | 0.06 | 0.14 | -0.00 | 0.05 | -0.05 | 0.10 | 0.13 | -0.10 | 0.13 | 0.06 | -0.04 | 0.12 | 0.21 | -0.04 | 0.03 | -0.06 | 0.01 |
| S11 | -0.06 | 0.02 | 0.10 | — | 0.28 | 0.14 | 0.09 | 0.11 | 0.01 | 0.00 | 0.08 | 0.30 | -0.04 | 0.11 | -0.06 | -0.09 | 0.08 | 0.28 | 0.03 | 0.03 | -0.06 |
| S12 | 0.05 | 0.12 | 0.06 | 0.28 | — | -0.00 | 0.02 | -0.07 | 0.01 | 0.05 | -0.09 | -0.02 | 0.09 | 0.14 | 0.03 | 0.14 | 0.01 | 0.08 | 0.26 | -0.01 | -0.10 |
| S14 | -0.05 | 0.10 | 0.14 | 0.14 | -0.00 | — | 0.12 | 0.02 | -0.07 | 0.14 | 0.18 | -0.08 | -0.04 | 0.05 | -0.06 | 0.03 | -0.03 | 0.07 | 0.02 | 0.10 | 0.03 |
| S18 | 0.11 | 0.13 | -0.00 | 0.09 | 0.02 | 0.12 | — | -0.00 | 0.11 | -0.09 | 0.01 | -0.02 | 0.03 | 0.06 | 0.22 | 0.00 | 0.08 | -0.13 | -0.09 | 0.04 | 0.12 |
| A2 | 0.01 | 0.02 | 0.05 | 0.11 | -0.07 | 0.02 | -0.00 | — | 0.13 | 0.25 | -0.04 | -0.07 | 0.29 | 0.00 | -0.05 | 0.28 | -0.06 | -0.01 | 0.06 | 0.04 | -0.00 |
| A4 | 0.28 | 0.07 | -0.05 | 0.01 | 0.01 | -0.07 | 0.11 | 0.13 | — | 0.16 | 0.08 | 0.05 | 0.01 | -0.04 | -0.08 | 0.08 | 0.09 | 0.05 | -0.03 | 0.00 | -0.04 |
| A7 | -0.05 | -0.07 | 0.10 | 0.00 | 0.05 | 0.14 | -0.09 | 0.25 | 0.16 | — | -0.09 | 0.10 | -0.05 | 0.05 | 0.19 | 0.16 | 0.06 | -0.09 | -0.06 | 0.06 | 0.12 |
| A9 | 0.11 | 0.16 | 0.13 | 0.08 | -0.09 | 0.18 | 0.01 | -0.04 | 0.08 | -0.09 | — | 0.12 | 0.09 | -0.04 | -0.02 | -0.03 | 0.10 | 0.02 | 0.02 | 0.05 | -0.10 |
| A15 | -0.03 | 0.05 | -0.10 | 0.30 | -0.02 | -0.08 | -0.02 | -0.07 | 0.05 | 0.10 | 0.12 | — | 0.01 | 0.21 | 0.04 | 0.09 | -0.06 | -0.06 | 0.22 | 0.12 | 0.06 |
| A19 | -0.11 | 0.09 | 0.13 | -0.04 | 0.09 | -0.04 | 0.03 | 0.29 | 0.01 | -0.05 | 0.09 | 0.01 | — | 0.29 | 0.06 | -0.05 | 0.10 | 0.03 | -0.05 | 0.16 | -0.01 |
| A20 | 0.05 | -0.02 | 0.06 | 0.11 | 0.14 | 0.05 | 0.06 | 0.00 | -0.04 | 0.05 | -0.04 | 0.21 | 0.29 | — | 0.09 | -0.01 | -0.16 | -0.02 | 0.13 | -0.11 | 0.11 |
| D3 | 0.02 | -0.05 | -0.04 | -0.06 | 0.03 | -0.06 | 0.22 | -0.05 | -0.08 | 0.19 | -0.02 | 0.04 | 0.06 | 0.09 | — | -0.11 | -0.00 | 0.28 | -0.01 | 0.12 | 0.39 |
| D5 | 0.05 | -0.02 | 0.12 | -0.09 | 0.14 | 0.03 | 0.00 | 0.28 | 0.08 | 0.16 | -0.03 | 0.09 | -0.05 | -0.01 | -0.11 | — | -0.07 | 0.07 | 0.20 | 0.02 | 0.17 |
| D10 | 0.01 | 0.14 | 0.21 | 0.08 | 0.01 | -0.03 | 0.08 | -0.06 | 0.09 | 0.06 | 0.10 | -0.06 | 0.10 | -0.16 | -0.00 | -0.07 | — | 0.14 | 0.12 | 0.12 | 0.03 |
| D13 | 0.14 | -0.01 | -0.04 | 0.28 | 0.08 | 0.07 | -0.13 | -0.01 | 0.05 | -0.09 | 0.02 | -0.06 | 0.03 | -0.02 | 0.28 | 0.07 | 0.14 | — | -0.04 | 0.03 | 0.07 |
| D16 | 0.02 | 0.12 | 0.03 | 0.03 | 0.26 | 0.02 | -0.09 | 0.06 | -0.03 | -0.06 | 0.02 | 0.22 | -0.05 | 0.13 | -0.01 | 0.20 | 0.12 | -0.04 | — | 0.15 | -0.00 |
| D17 | 0.02 | -0.06 | -0.06 | 0.03 | -0.01 | 0.10 | 0.04 | 0.04 | 0.00 | 0.06 | 0.05 | 0.12 | 0.16 | -0.11 | 0.12 | 0.02 | 0.12 | 0.03 | 0.15 | — | 0.12 |
| D21 | 0.01 | 0.07 | 0.01 | -0.06 | -0.10 | 0.03 | 0.12 | -0.00 | -0.04 | 0.12 | -0.10 | 0.06 | -0.01 | 0.11 | 0.39 | 0.17 | 0.03 | 0.07 | -0.00 | 0.12 | — |

**Table S4**. The network nodes strength and expected influence difference test results (T1-T2)

|  |  |  |  |
| --- | --- | --- | --- |
| Nodes | Strength | Nodes | Expected Influence |
| A2 | 1.396\*\*\* | S11 | -1.945\* |
| S11 | -2.260\* | D16 | -1.670\* |
| D16 | -1.753\* | A2 | -1.501\* |
| S12 | 2.12 | D5 | -1.437\* |
| A4 | 2.105 | A15 | 1.63 |
| S6 | 1.498 | D13 | 1.55 |
| D21 | 0.957 | S6 | 1.046 |
| D17 | 0.751 | S8 | 1.001 |
| S1 | 0.309 | D3 | 0.818 |
| S8 | 0.298 | A4 | 0.666 |
| A9 | 0.275 | D10 | 0.663 |
| S14 | 0.217 | S1 | 0.459 |
| A20 | 0.121 | A20 | 0.264 |
| D3 | -0.08 | A19 | 0.205 |
| D10 | -0.158 | S12 | 0.187 |
| D13 | -0.165 | S18 | 0.025 |
| S18 | -0.534 | A9 | 0.011 |
| A19 | -0.635 | S14 | -0.111 |
| A7 | -0.982 | D21 | -0.505 |
| D5 | -1.7 | D17 | -0.534 |
| A15 | -1.778 | A7 | -0.823 |

**Table S5**. The network edges difference at two-time points (T1-T2)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node | S1 | S6 | S8 | S11 | S12 | S14 | S18 | A2 | A4 | A7 | A9 | A15 | A19 | A20 | D3 | D5 | D10 | D13 | D16 | D17 | D21 |
| S1 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S6 | 0.01 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S8 | 0.00 | -0.07 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S11 | 0.08 | -0.02 | -0.07 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S12 | 0.00 | 0.04 | 0.12 | -0.07 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S14 | 0.08 | -0.09 | -0.09 | -0.09 | 0.23\* | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S18 | -0.12 | 0.03 | 0.12 | -0.09 | -0.09 | 0.04 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A2 | 0.14 | 0.06 | 0.02 | -0.03 | -0.12 | 0.08 | -0.02 | — |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A4 | -0.37\*\*\* | 0.03 | 0.14\* | 0.00 | 0.08 | -0.02 | -0.17 | 0.07 | — |  |  |  |  |  |  |  |  |  |  |  |  |
| A7 | 0.09 | 0.29\* | -0.06 | 0.10 | -0.16 | -0.08 | 0.12 | -0.38\*\*\* | -0.02 | — |  |  |  |  |  |  |  |  |  |  |  |
| A9 | -0.16 | -0.02 | 0.04 | 0.11 | 0.09 | -0.09 | 0.02 | 0.02 | -0.11\* | -0.06 | — |  |  |  |  |  |  |  |  |  |  |
| A15 | 0.03 | -0.01 | 0.13 | -0.08 | 0.02 | -0.01 | 0.11 | 0.12 | -0.03 | -0.01 | -0.10 | — |  |  |  |  |  |  |  |  |  |
| A19 | 0.10 | -0.16 | -0.02 | 0.03 | 0.00 | 0.13 | 0.01 | -0.23\* | 0.24\*\* | 0.16 | -0.07 | 0.02 | — |  |  |  |  |  |  |  |  |
| A20 | 0.03 | -0.04 | -0.14 | -0.03 | -0.01 | -0.02 | 0.07 | -0.01 | 0.19\* | -0.05 | 0.10 | -0.01 | -0.05 | — |  |  |  |  |  |  |  |
| D3 | 0.05 | 0.23\*\*\* | -0.01 | -0.08 | 0.18 | 0.08 | -0.28\* | 0.18 | 0.24\*\*\* | 0.05 | -0.02 | 0.00 | -0.14 | -0.09 | — |  |  |  |  |  |  |
| D5 | 0.11 | 0.21\*\*\* | -0.04 | 0.09 | -0.13 | -0.10 | 0.00 | -0.15 | -0.07 | -0.06 | 0.20 | -0.07 | 0.01 | -0.09 | 0.08 | — |  |  |  |  |  |
| D10 | 0.10 | -0.10 | -0.22\*\* | 0.08 | 0.09 | -0.04 | -0.08 | 0.23\* | -0.24 | -0.08 | 0.03 | 0.05 | -0.02 | 0.13 | 0.07 | 0.07 | — |  |  |  |  |
| D13 | -0.17 | 0.06 | 0.25\* | -0.21 | -0.07 | -0.06 | 0.20 | -0.09 | 0.03 | 0.02 | -0.04 | 0.26\*\* | -0.06 | 0.18 | -0.10 | -0.02 | -0.08 | — |  |  |  |
| D16 | 0.03 | -0.14 | -0.01 | 0.02 | -0.25\*\* | 0.08 | 0.07 | -0.05 | 0.01 | 0.05 | 0.06 | -0.08 | 0.12 | -0.23\* | 0.11\* | -0.22\*\* | -0.06 | 0.15 | — |  |  |
| D17 | 0.07 | 0.04 | -0.01 | -0.03 | -0.11 | -0.03 | 0.09 | -0.03 | 0.04 | -0.05 | -0.11 | -0.11 | -0.06 | 0.20\* | -0.15\*\* | -0.05 | -0.07 | 0.01 | -0.01 | — |  |
| D21 | -0.08 | -0.16 | 0.06 | 0.01 | 0.19 | -0.07 | -0.07 | -0.10 | 0.01 | -0.07 | 0.04 | 0.04 | -0.01 | -0.09 | -0.28\*\* | -0.03 | 0.21\*\* | -0.03 | 0.07 | 0.25\* | — |

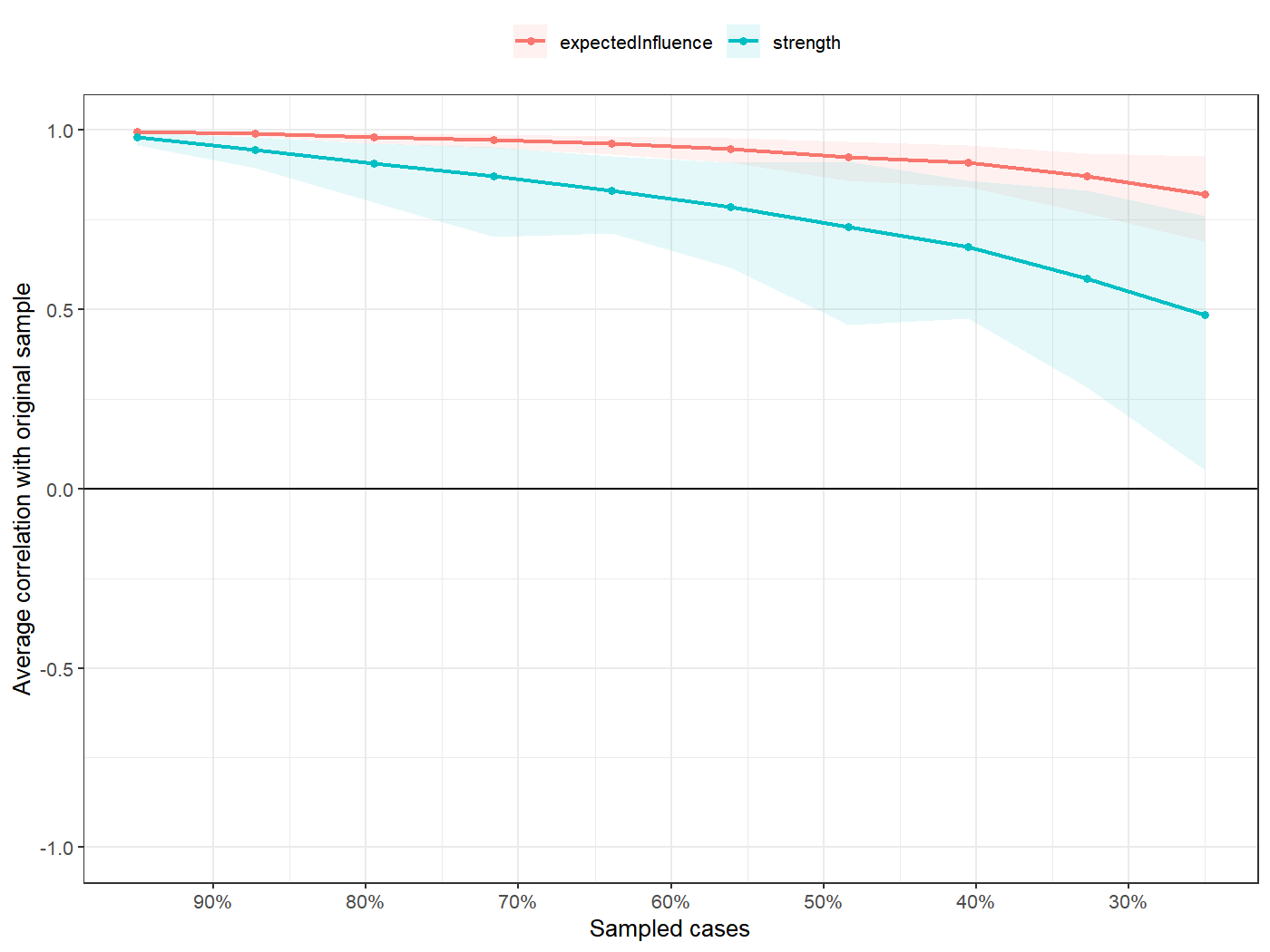
**Table S6**. The edge coefficients for the Depression-Anxiety-Stress CLPN (autoregression omitted)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node | S1 | S6 | S8 | S11 | S12 | S14 | S18 | A2 | A4 | A7 | A9 | A15 | A19 | A20 | D3 | D5 | D10 | D13 | D16 | D17 | D21 |
| S1 | — |  |  |  |  |  | 0.06 | 0.01 | 0.00 | 0.06 |  |  |  | 0.06 | 0.04 |  |  | 0.06 | 0.05 | 0.06 | 0.02 |
| S6 | 0.08 | — | 0.22 |  |  | 0.09 |  | 0.05 |  | 0.09 |  | 0.02 | 0.09 | 0.04 |  | 0.05 |  |  | 0.05 |  | 0.04 |
| S8 |  | 0.10 | — | 0.04 |  |  |  |  |  |  | 0.03 |  |  |  |  |  | 0.00 |  | 0.01 | 0.02 | 0.03 |
| S11 |  | 0.02 | 0.01 | — | 0.01 |  |  |  |  |  |  |  | 0.04 |  |  |  | 0.05 | 0.01 | 0.00 |  |  |
| S12 |  | 0.00 |  | 0.01 | — |  |  |  | 0.03 | 0.01 |  | 0.09 | 0.10 | 0.01 |  |  |  |  |  | 0.02 |  |
| S14 |  |  |  |  |  | — | 0.03 |  |  |  |  |  | -0.04 |  |  |  |  |  | -0.03 |  |  |
| S18 | 0.04 | 0.10 |  | 0.08 | 0.07 |  | — | 0.05 | 0.07 |  | 0.00 | 0.06 | 0.06 |  | 0.08 | 0.10 | 0.04 | 0.15 | 0.05 | 0.05 | 0.09 |
| A2 | 0.01 | 0.07 | 0.02 | 0.12 | 0.13 | 0.06 |  | — | 0.27 | 0.00 | 0.11 | 0.06 |  | 0.02 |  | 0.09 |  | 0.08 | 0.06 |  |  |
| A4 |  |  |  | 0.00 |  |  |  | 0.12 | — | 0.12 |  |  | 0.07 |  |  |  |  |  |  |  |  |
| A7 |  |  |  |  |  | 0.00 |  |  | 0.04 | — |  |  |  |  |  |  |  | 0.01 |  |  |  |
| A9 |  | 0.09 | 0.12 | 0.05 | 0.07 | 0.04 | 0.01 |  | 0.06 |  | — | 0.00 | 0.03 | 0.06 |  |  | 0.04 |  | 0.04 |  |  |
| A15 |  |  |  | 0.04 |  |  |  |  | -0.11 |  |  | — |  | 0.02 |  |  |  |  |  | 0.01 |  |
| A19 |  | 0.06 | 0.06 | 0.06 | 0.10 | 0.18 | 0.03 | 0.08 |  | 0.09 | 0.03 | 0.01 | — | 0.05 |  | 0.06 | 0.02 |  | 0.04 | 0.02 | 0.01 |
| A20 |  |  |  |  |  |  |  | 0.05 |  |  |  | 0.01 | 0.01 | — |  |  |  |  | 0.06 | 0.01 |  |
| D3 |  | 0.01 | 0.04 | 0.02 | 0.08 |  |  | 0.05 | 0.04 |  |  |  | 0.01 | 0.00 | — | 0.06 |  |  | 0.01 |  |  |
| D5 | 0.01 | 0.03 |  |  |  |  |  |  | 0.03 |  | 0.11 |  | 0.01 |  |  | — | 0.20 |  | 0.02 | 0.01 |  |
| D10 |  | 0.08 |  | 0.01 |  |  |  |  |  |  |  | 0.01 |  | 0.00 | 0.02 |  | — | 0.14 | 0.02 | 0.09 |  |
| D13 | 0.02 | 0.02 |  | 0.04 | 0.10 |  |  |  |  | 0.01 |  | 0.08 |  | 0.02 |  | 0.15 |  | — | 0.15 |  |  |
| D16 | 0.02 |  | 0.03 |  |  |  | 0.20 |  | 0.03 | 0.00 | 0.00 |  | 0.12 |  | 0.04 | 0.01 | 0.09 | 0.00 | — | 0.20 | 0.02 |
| D17 |  |  |  |  |  |  |  |  | 0.13 | 0.03 |  |  |  |  |  |  | 0.01 |  |  | — | 0.11 |
| D21 | 0.00 |  |  | 0.01 |  |  |  |  | -0.06 |  |  |  | -0.05 |  | 0.21 |  |  | 0.13 |  | 0.01 | — |

Note: Columns indicate T1 nodes, rows indicate T2 nodes.

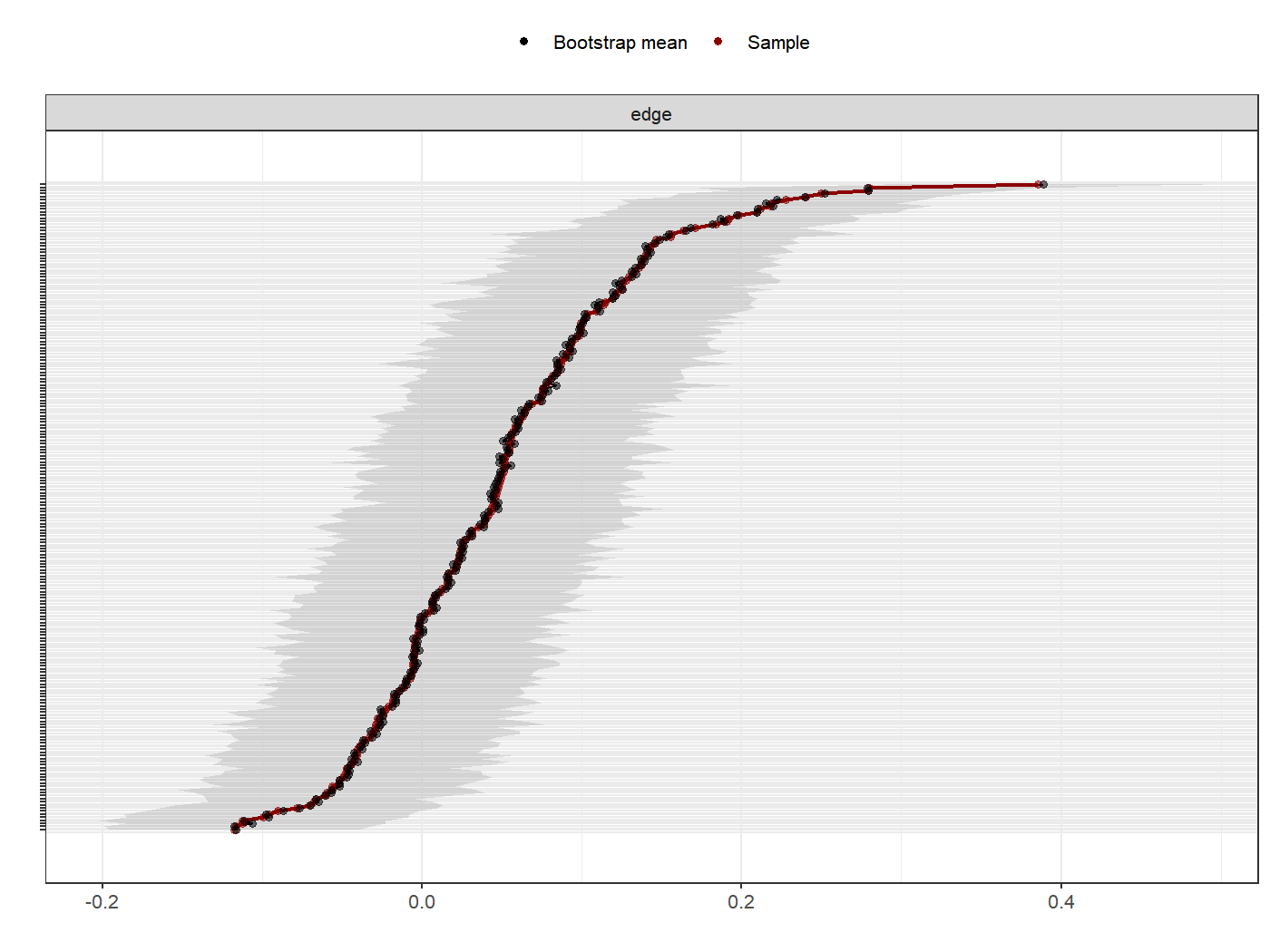
**Table S7**. The bridge edge coefficient of DASS-21 for SWLS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Node | SWLS1 | SWLS2 | SWLS3 | SWLS4 | SWLS5 |
| S1 |  |  |  |  | -0.006 |
| S6 |  | -0.063 | -0.002 | -0.092 |  |
| S8 | -0.093 | -0.135 | -0.085 | -0.074 |  |
| S11 | -0.031 | -0.076 | -0.133 | -0.135 | -0.278 |
| S12 |  |  |  |  |  |
| S14 |  |  |  |  |  |
| S18 |  |  |  |  |  |
| A2 |  | 0.134 |  |  |  |
| A4 |  |  |  |  |  |
| A7 |  |  |  |  |  |
| A9 |  |  |  |  |  |
| A15 | -0.049 | -0.127 |  |  |  |
| A19 |  |  |  |  | -0.156 |
| A20 |  |  |  |  |  |
| D3 |  |  |  |  |  |
| D5 |  |  |  | -0.024 |  |
| D10 | -0.012 | -0.081 | -0.101 | -0.007 | -0.049 |
| D13 |  |  |  |  |  |
| D16 |  |  |  |  |  |
| D17 |  |  |  |  |  |
| D21 |  |  |  |  |  |



**Figure S1**. Stability test results of the Case-dropping method for testing the intensity and expected influence in the DASS-21 cross-sectional network

Note. The X-axis indicates the percentage of cases remaining after randomly dropping samples on the original sample; the Y-axis indicates the correlation of the centrality metrics between the remaining samples and the original sample. Points on the lines in the figure indicate the average correlation (from 90% to 10%) between the intensity estimated in the full sample and the intensity estimated on a random subsample that retains only a percentage of cases. Shaded areas indicate 95% bootstrap confidence intervals for the correlation estimates. Higher values indicate better stability of the centrality estimates.



**Figure S2**. Nonparametric bootstrap method to test the accuracy of edge estimation in the DASS-21 cross-sectional network

Note. The red and black dots on each horizontal line indicate the sample values of the edges and the estimated bootstrap means, respectively. The shaded portion of each horizontal line is the 95% confidence interval of the bootstrap estimate of the edges, with narrower gray shading implying higher accuracy of the edges.