**Supplementary Table 1**

*Cross-lagged and autoregressive associations between model self-report variables.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Day 2 Outcome** | **Day 1 Predictor** | **B** | **β** | ***p*** | **SE** |
| **PD (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.75 | 0.73 | < .001 | .01 |
|  | **PB (T1)** | 0.22 | 0.13 | < .001 | .01 |
|  | **TB (T1)** | 0.13 | 0.06 | < .001 | .01 |
| **PB (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.05 | 0.09 | < .001 | .01 |
|  | **PB (T1)** | 0.79 | 0.79 | < .001 | .01 |
|  | **TB (T1)** | 0.07 | 0.06 | < .001 | .01 |
| **TB (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.01 | 0.02 | .300 | .01 |
|  | **PB (T1)** | 0.09 | 0.11 | < .001 | .01 |
|  | **TB (T1)** | 0.67 | 0.68 | < .001 | .01 |
|  |  |  |  |  |  |
| **WTL (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.05 | 0.19 | < .001 | .02 |
|  | **TB (T1)** | 0.03 | 0.09 | < .001 | .01 |
|  | **WTL (T1)** | 0.57 | 0.57 | < .001 | .01 |
| **PB (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.82 | 0.81 | < .001 | .01 |
|  | **TB (T1)** | 0.07 | 0.06 | < .001 | .01 |
|  | **WTL (T1)** | 0.26 | 0.06 | < .001 | .01 |
| **TB (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.07 | 0.09 | < .001 | .02 |
|  | **TB (T1)** | 0.66 | 0.67 | < .001 | .01 |
|  | **WTL (T1)** | 0.23 | 0.07 | < .001 | .01 |
|  |  |  |  |  |  |
| **WTD (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.04 | 0.15 | < .001 | .01 |
|  | **TB (T1)** | 0.01 | 0.04 | < .001 | .01 |
|  | **WTD (T1)** | 0.68 | 0.70 | < .001 | .01 |
| **PB (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.79 | 0.78 | < .001 | .01 |
|  | **TB (T1)** | 0.07 | 0.06 | < .001 | .01 |
|  | **WTD (T1)** | 0.34 | 0.10 | < .001 | .01 |
| **TB (T2)** |  |  |  |  |  |
|  | **PB (T1)** | 0.10 | 0.12 | < .001 | .02 |
|  | **TB (T1)** | 0.68 | 0.68 | < .001 | .01 |
|  | **WTD (T1)** | -.01 | 0.00 | 0.815 | .02 |
|  |  |  |  |  |  |
| **PD (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.75 | 0.73 | < .001 | .01 |
|  | **WTL (T1)** | 0.71 | 0.10 | < .001 | .01 |
|  | **WTD (T1)** | 0.50 | 0.08 | < .001 | .01 |
| **WTL (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.02 | 0.11 | < .001 | .02 |
|  | **WTL (T1)** | 0.55 | 0.55 | < .001 | .01 |
|  | **WTD (T1)** | 0.15 | 0.17 | < .001 | .02 |
| **WTD (T2)** |  |  |  |  |  |
|  | **PD (T1)** | 0.02 | 0.11 | < .001 | .01 |
|  | **WTL (T1)** | 0.13 | 0.11 | < .001 | .01 |
|  | **WTD (T1)** | 0.65 | 0.67 | < .001 | .01 |

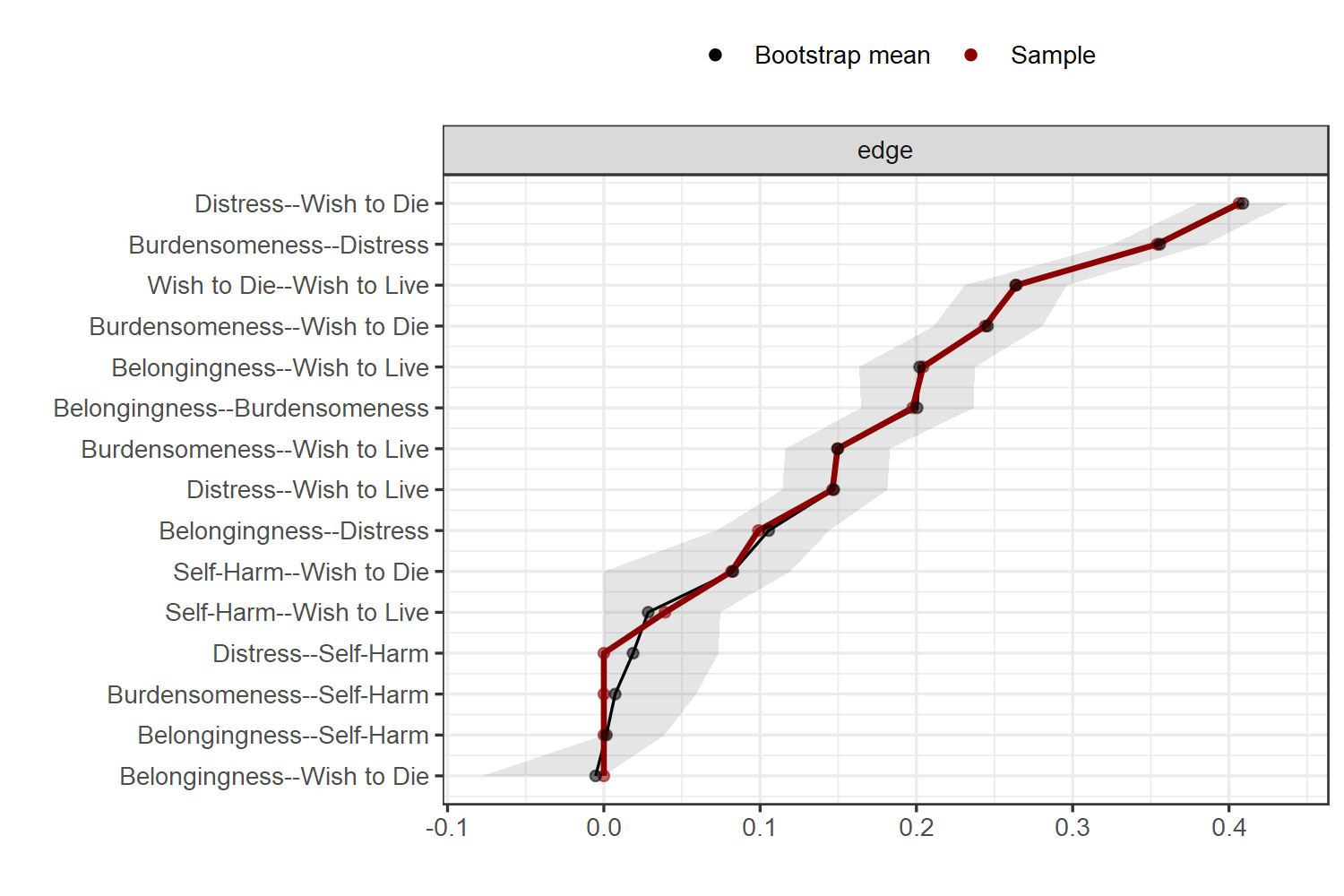
*Note*. PD = Psychological Distress, PB = Perceived Burdensomeness, TB = Thwarted Belongingness, WTL = Wish to Live, WTD = Wish to Die. B = Unstandardized beta. **β** = Standardized beta. SE = standard error. T1 = self-report on the day prior to self-harm. For the comparison group this was the first day they answered questionnaires two days in a row. T2 = self-report on the day of self-harm. For the comparison group this was the second day they answered questionnaires two days in a row or more.

**Supplementary Table 2**

*Network Weights*

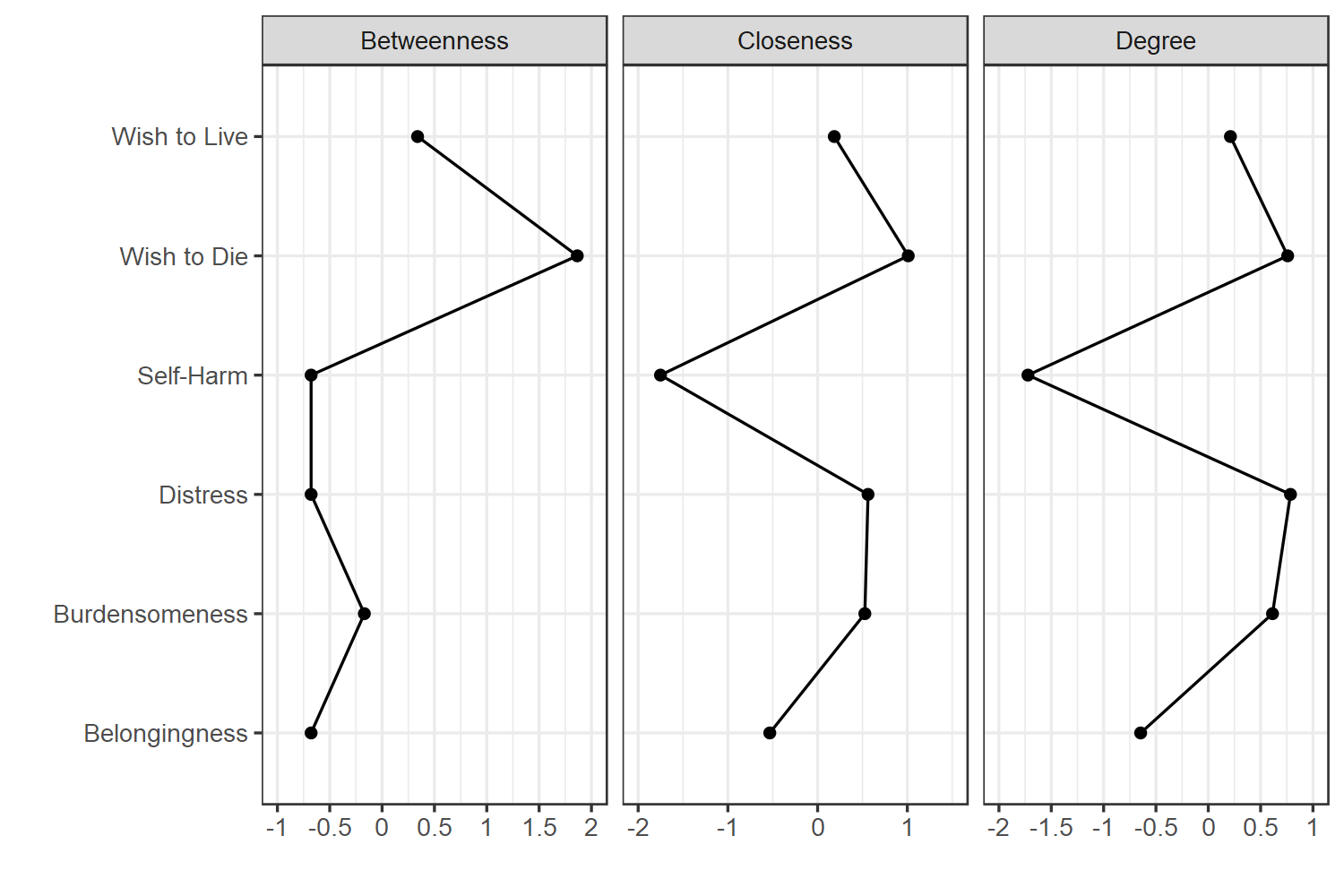
|  | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Network Weights** | | | | | | | | | | | |
| **Variable** | | **Belongingness** | | **Burdensomeness** | | **Distress** | | **Self-Harm** | | **Wish to Die** | | **Wish to Live** | |
| Belongingness |  | 0.000 |  | 0.198 |  | 0.099 |  | 0.000 |  | 0.000 |  | 0.204 |  |
| Burdensomeness |  | 0.198 |  | 0.000 |  | 0.354 |  | 0.000 |  | 0.244 |  | 0.150 |  |
| Distress |  | 0.099 |  | 0.354 |  | 0.000 |  | 0.000 |  | 0.406 |  | 0.146 |  |
| Self-Harm |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.082 |  | 0.039 |  |
| Wish to Die |  | 0.000 |  | 0.244 |  | 0.406 |  | 0.082 |  | 0.000 |  | 0.264 |  |
| Wish to Live |  | 0.204 |  | 0.150 |  | 0.146 |  | 0.039 |  | 0.264 |  | 0.000 |  |
|  | | | | | | | | | | | | | |

*Edge Stability*



| *Centrality measures per variable* | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Network** | | | | | |
| **Variable** | | **Betweenness** | | **Closeness** | | **Strength** | |
| Belongingness |  | -0.678 |  | -0.533 |  | -0.646 |  |
| Burdensomeness |  | -0.170 |  | 0.526 |  | 0.614 |  |
| Distress |  | -0.678 |  | 0.562 |  | 0.785 |  |
| Self-Harm |  | -0.678 |  | -1.751 |  | -1.723 |  |
| Wish to Die |  | 1.865 |  | 1.010 |  | 0.758 |  |
| Wish to Live |  | 0.339 |  | 0.186 |  | 0.212 |  |
|  | | | | | | | |

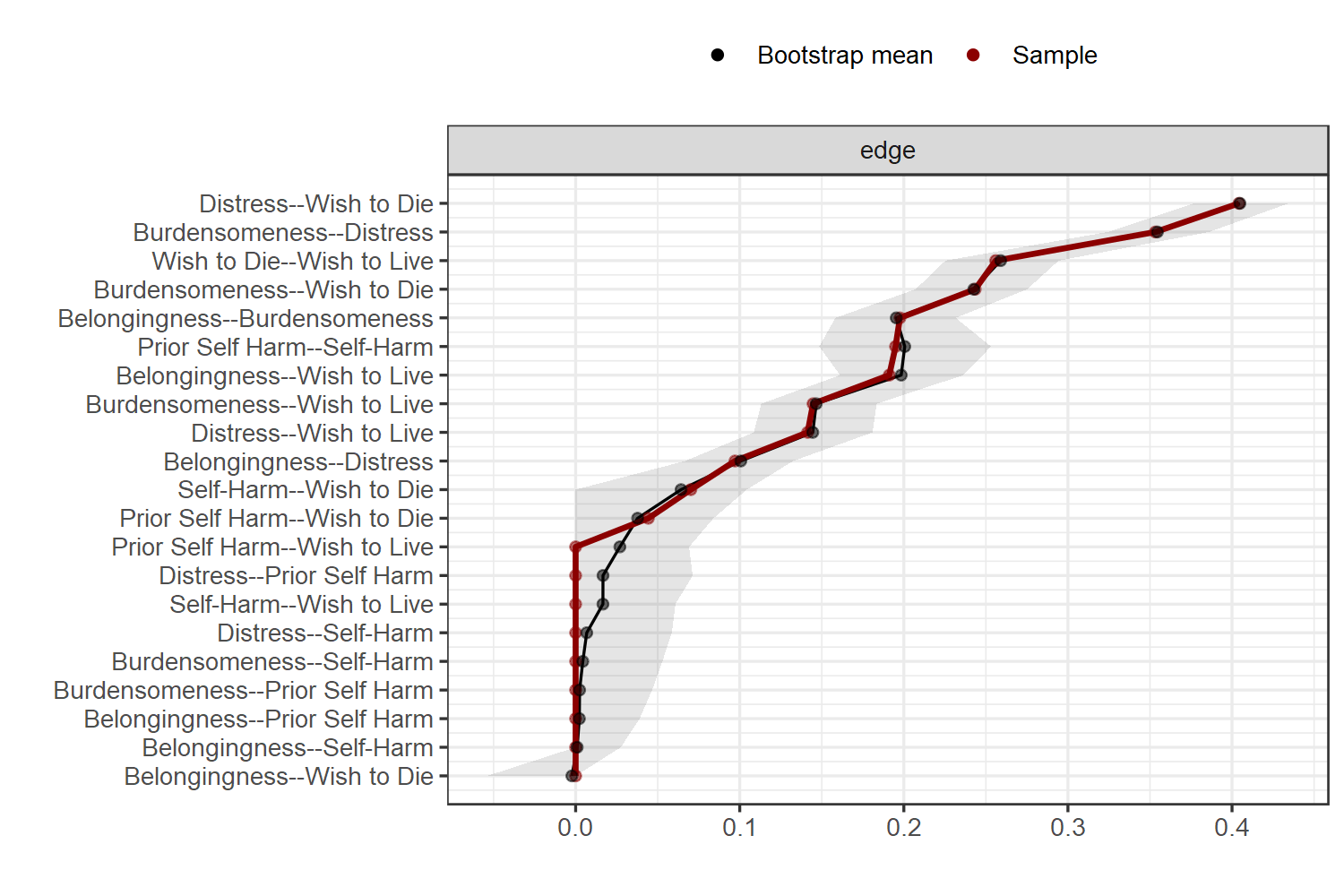
*Centrality Plot*



**Supplementary Table 3**

| *Weights matrix* | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Network** | | | | | | | | | | | | | |
| **Variable** | | **Belongingness** | | **Burdensomeness** | | **Distress** | | **Self-Harm** | | **Wish to Die** | | **Wish to Live** | | **Prior Self Harm** | |
| Belongingness |  | 0.000 |  | 0.198 |  | 0.097 |  | 0.000 |  | 0.000 |  | 0.191 |  | 0.000 |  |
| Burdensomeness |  | 0.198 |  | 0.000 |  | 0.353 |  | 0.000 |  | 0.243 |  | 0.145 |  | 0.000 |  |
| Distress |  | 0.097 |  | 0.353 |  | 0.000 |  | 0.000 |  | 0.404 |  | 0.141 |  | 0.000 |  |
| Self-Harm |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.070 |  | 0.000 |  | 0.195 |  |
| Wish to Die |  | 0.000 |  | 0.243 |  | 0.404 |  | 0.070 |  | 0.000 |  | 0.256 |  | 0.044 |  |
| Wish to Live |  | 0.191 |  | 0.145 |  | 0.141 |  | 0.000 |  | 0.256 |  | 0.000 |  | 0.000 |  |
| Prior Self Harm |  | 0.000 |  | 0.000 |  | 0.000 |  | 0.195 |  | 0.044 |  | 0.000 |  | 0.000 |  |
|  | | | | | | | | | | | | | | | |

*Edge Stability*



| *Centrality measures per variable* | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Network** | | | | | |
| **Variable** | | **Betweenness** | | **Closeness** | | **Strength** | |
| Belongingness |  | -0.754 |  | -0.400 |  | -0.539 |  |
| Burdensomeness |  | -0.461 |  | 0.606 |  | 0.801 |  |
| Distress |  | -0.754 |  | 0.745 |  | 0.969 |  |
| Self-Harm |  | 0.712 |  | -0.971 |  | -1.191 |  |
| Wish to Die |  | 1.886 |  | 1.211 |  | 1.035 |  |
| Wish to Live |  | 0.126 |  | 0.352 |  | 0.192 |  |
| Prior Self Harm |  | -0.754 |  | -1.544 |  | -1.267 |  |
|  | | | | | | | |

*Centrality Plot*

