**Table S1**

*Differences between participants included and excluded due to compliance*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Compliance** |  |  | |  | **< 1/3** |  |  |  |  | **>= 1/3** |  | **Comparison** |
|  | **N** | | **Mean (S.D.)** | **Range** | **Freq.** | **Perc.** | **n** | **Mean (S.D.)** | **Range** | **Freq.** | **Perc.** | ***p*** |
| **Age** | 44 | | 25.0 (7.9) | 17 – 55 |  |  | 137 | 23.3 (4.9) | 15 – 35 |  |  | .169 |
| **Gender** | 44 | |  |  |  |  | 137 |  |  |  |  | .006\* |
| **Male** |  | |  |  | 29 | 65.9% |  |  |  | 57 | 41.6% |  |
| **Female** |  | |  |  | 15 | 34.1% |  |  |  | 80 | 58.4% |  |
| **Race** | 43 | |  |  |  |  | 137 |  |  |  |  | .067 |
| **White** |  | |  |  | 29 | 67.4% |  |  |  | 102 | 74.5% |  |
| **Black** |  | |  |  | 2 | 4.7% |  |  |  | 16 | 11.7% |  |
| **Asian** |  | |  |  | 4 | 9.3% |  |  |  | 3 | 2.2% |  |
| **Other** |  | |  |  | 8 | 18.6% |  |  |  | 16 | 11.7% |  |
| **PEs** | 27 | | 2.5 (1.2) | 1.0 – 4.8 |  |  | 139 | 2.3 (1.0) | 1.0 – 5.8 |  |  | .357 |
| **SI** | 27 | |  |  |  | 44.1% | 139 |  |  |  | 41.1% | .662 |
| **SS** | 21 | | 3.7 (1.2) | 2.0 – 6.8 |  |  | 136 | 3.5 (1.4) | 1.0 – 7.0 |  |  | .528 |
| **NA** | 27 | | 3.1 (1.1) | 1.0 – 5.3 |  |  | 139 | 3.0 (1.1) | 1.0 – 6.4 |  |  | .746 |
| **GAF symptoms** | 31 | | 50.6 (7.2) | 32 – 61 |  |  | 136 | 52.3 (9.2) | 20 – 75 |  |  | .247 |
| **GAF disability** | 31 | | 50.0 (11.0) | 30 – 70 |  |  | 136 | 53.9 (11.8) | 30 – 85 |  |  | .078 |

Analyses include participants that did not provide demographic information or GAF scores

S.D. = standard deviation

SI has been coded as a binary variable, therefore the means imply proportion of time spent alone.

PEs = psychotic experiences, SI = social isolation, SS = solitary stress, NA = negative affect

\*= >0.05, \*\*= >0.001

**Table S2**

*Sample characteristics*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **EU-GEI** |  |  |  | **INTERACT** |  | **Comparison** |
|  | **Mean (S.D.)** | **Range** | **Freq.** | **Perc.** | **Mean (S.D.)** | **Range** | **Freq.** | **Perc.** | ***p*** |
| **Age** | 23.1 (5.0) | 15 – 30 |  |  | 24.1 (4.8) | 15 – 35 |  |  | .454 |
| **Gender** |  |  |  |  |  |  |  |  | .487 |
| **Male** |  |  | 35 | 44.3% |  |  | 22 | 37.9% |  |
| **Female** |  |  | 44 | 55.7% |  |  | 36 | 62.1% |  |
| **Race** |  |  |  |  |  |  |  |  | .039\* |
| **White** |  |  | 53 | 67.1% |  |  | 49 | 84.5% |  |
| **Black** |  |  | 12 | 15.2% |  |  | 4 | 6.9% |  |
| **Asian** |  |  | 1 | 1.3% |  |  | 2 | 3.4% |  |
| **Other** |  |  | 13 | 16.5% |  |  | 3 | 5.2% |  |
| **PEs** | 2.3 (1.1) | 1.0 – 5.8 |  |  | 2.3 (0.8) | 1.0 – 4.3 |  |  | .852 |
| **SI** |  |  |  | 43.7% |  |  |  | 37.6% | .174 |
| **SS** | 3.3 (1.4) | 1.0 – 6.6 |  |  | 3.7 (1.4) | 1.0 – 7.0 |  |  | .111 |
| **NA** | 3.1 (1.2) | 1.1 – 6.4 |  |  | 2.9 (1.1) | 1.0 – 6.2 |  |  | .325 |
| **Compliance** | 40 (10) | 20 – 57 | 3 | 66.7% | 34 (12) | 1 – 56 | 2 | 56.6% | >.001\*\* |
| **GAF symptoms** | 53.0 (9.9) | 20 – 75 |  |  | 51.5 (8.1) | 30 – 70 |  |  | .321 |
| **GAF disability** | 56.2 (13.1) | 33 – 85 |  |  | 50.9 (9.2) | 30 – 71 |  |  | .007\* |

S.D. = standard deviation

SI has been coded as a binary variable, therefore the means imply proportion of time spent alone.

PEs = psychotic experiences, SI = social isolation, SS = solitary stress, NA = negative affect

\*= >0.05, \*\*= >0.001

**Table S3**

*Random effect ‘study’ variable*

|  |  |  |
| --- | --- | --- |
| **Hypothesis** | **Variance study level** | **ICC** |
| SI predicts subsequent PEs | 6.17e-17 | .00 |
| PEs predict subsequent SI | 4.99e-28 | .00 |
| SS predicts subsequent PEs | 3.95e-24 | .00 |
| NA predicts subsequent PEs | 9.17e-23 | .00 |

ICC = intraclass correlation

PEs = psychotic experiences, SI = social isolation, SS = solitary stress, NA = negative affect

**Table S4**

*The momentary association between social isolation (SI) and consecutive psychotic experiences (PEs)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **PEs (t0)** |  |  |
|  | **B (S.E.)** | **95% CI** | ***p*** | **Ppn (obs)** |
| **SI (t-1)** | -0.02 (0.03) | -0.08 to 0.04 | .551 | 135 (2943) |
| **Study** | 0.14 (0.17) | -0.20 to 0.47 | .420 | 135 (2943) |
| **Age** | -0.04 (0.02) | -0.07 to -0.00 | .027\* | 135 (2943) |
| **Gender (f)** | 0.31 (0.16) | -0.01 to 0.63 | .055 | 135 (2943) |
| **Race (Black)** | 0.54 (0.26) | 0.02 to 1.05 | .040\* | 135 (2943) |
| **Race (Asian)** | 0.05 (0.55) | -1.04 to 1.14 | .929 | 135 (2943) |
| **Race (Other)** | 0.14 (0.27) | -0.38 to 0.66 | .587 | 135 (2943) |
| **RE subj\_id: unstructured** |  |  |  |  |
| **Var(a~1\_comb)** | 0.00 (0.00) | 0.00 to 0.02 |  |  |
| **Var(\_cons)** | 0.80 (0.11) | 0.61 to 1.03 |  |  |
| **Cov(a~1\_comb,\_cons)** | 0.04 (0.02) | -0.01 to 0.09 |  |  |
| **Residual: AR (1)** |  |  |  |  |
| **Rho** | 0.23 (0.02) | 0.19 to 0.28 |  |  |
| **Var(e)** | 0.45 (0.01) | 0.43 to 0.48 |  |  |

PEs = psychotic experiences, SI = social isolation

B = unstandardized point estimate, S.E. = standard error, CI = confidence interval

Ppn = participants, obs = observations

Gender: men as dummy variable; Race: white as dummy variable; Study: EU-GEI dataset as dummy variable

\*= >0.05, \*\*= >0.001

Subj\_id: number indicating participant/subject

RE = Random Effects parameter

AR = Autoregression

**Table S5**

*The momentary association between psychotic experiences (PEs) and consecutive social isolation (SI)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **SI (t0)** |  |  |
|  | **B (S.E.)** | **95% CI** | ***p*** | **Ppn (obs)** |
| **PEs (t-1)** | 0.08 (0.07) | -0.05 to 0.21 | .225 | 135 (2939) |
| **Study** | 0.33 (0.25) | -0.15 to 0.82 | .179 | 135 (2939) |
| **Age** | 0.16 (0.02) | -0.03 to 0.06 | .486 | 135 (2939) |
| **Gender (f)** | 0.71 (0.23) | 0.25 to 1.16 | .002\* | 135 (2939) |
| **Race (black)** | -0.40 (0.37) | -1.13 to 0.33 | .278 | 135 (2939) |
| **Race (Asian)** | -1.65 (0.90) | -3.42 to 0.12 | .067 | 135 (2939) |
| **Race (other)** | 0.35 (0.38) | -0.41 to 1.10 | .365 | 135 (2939) |

PEs = psychotic experiences, SI = social isolation

B = unstandardized point estimate, S.E. = standard error, CI = confidence interval

Ppn = participants, obs = observations

Gender: men as dummy variable; Race: white as dummy variable; Study: EU-GEI dataset as dummy variable

\*= >.05

**Table S6**

*The momentary association between solitary stress (SS) and consecutive psychotic experiences (PEs)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **PEs (t0)** |  |  |
|  | **B (S.E.)** | **95% CI** | ***p*** | **Ppn (obs)** |
| **SS (t-1)** | 0.02 (0.02) | -0.01 to 0.06 | .200 | 130 (1231) |
| **Study** | 0.16 (0.18) | -0.20 to 0.51 | .386 | 130 (1231) |
| **Age** | -0.04 (0.02) | -0.07 to -0.01 | .024\* | 130 (1231) |
| **Gender (f)** | 0.35 (0.17) | 0.02 to 0.69 | .038\* | 130 (1231) |
| **Race (black)** | 0.57 (0.27) | 0.04 to 1.10 | .034\* | 130 (1231) |
| **Race (Asian)** | 0.18 (0.57) | -0.95 to 1.30 | .758 | 130 (1231) |
| **Race (other)** | 0.15 (0.28) | -0.39 to 0.70 | .583 | 130 (1231) |
| **RE subj\_id: unstructured** |  |  |  |  |
| **Var(a~1\_comb)** | 0.00 (0.00) | 2.82e-06 to 0.01 |  |  |
| **Var(\_cons)** | 0.81 (0.11) | 0.62 to 1.07 |  |  |
| **Cov(a~1\_comb,\_cons)** | -0.01 (0.01) | -0.04 to 0.01 |  |  |
| **Residual: AR (1)** |  |  |  |  |
| **Rho** | 0.29 (0.04) | 0.20 to 0.37 |  |  |
| **Var(e)** | 0.50 (0.02) | 0.45 to 0.55 |  |  |

PEs = psychotic experiences, SS = solitary stress

B = unstandardized point estimate, S.E. = standard error, CI = confidence interval

Ppn = participants, obs = observations

Gender: men as dummy variable; Race: white as dummy variable; Study: EU-GEI dataset as dummy variable

\*= >0.05

Subj\_id: number indicating participant/subject

RE = Random Effects parameter

AR = Autoregression

**Table S7**

*The momentary association between negative affect when alone (NA) and consecutive psychotic experiences (PEs)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **PEs (t0)** |  |  |
|  | **B (S.E.)** | **95% CI** | ***p*** | **Ppn (obs)** |
| **NA (t-1)** | 0.13 (0.03) | 0.08 to 0.21 | >.001\*\* | 130 (1233) |
| **Study** | 0.16 (0.18) | -0.20 to 0.52 | .393 | 130 (1233) |
| **Age** | -0.04 (0.02) | -0.07 to -0.01 | .023\* | 130 (1233) |
| **Gender (f)** | 0.37 (0.17) | 0.04 to 0.71 | .029\* | 130 (1233) |
| **Race (black)** | 0.55 (0.27) | 0.02 to 1.08 | .043\* | 130 (1233) |
| **Race (Asian)** | 0.10 (0.57) | -1.03 to 1.22 | .868 | 130 (1233) |
| **Race (other)** | 0.15 (0.28) | -0.40 to 0.70 | .594 | 130 (1233) |
| **RE subj\_id: unstructured** |  |  |  |  |
| **Var(a~1\_comb)** | 0.01 (0.01) | 0.00 to 0.04 |  |  |
| **Var(\_cons)** | 0.82 (0.11) | 0.63 to 1.08 |  |  |
| **Cov(a~1\_comb,\_cons)** | -0.01 (0.02) | -0.05 to 0.03 |  |  |
| **Residual: AR (1)** |  |  |  |  |
| **Rho** | 0.20 (0.05) | 0.10 to 0.29 |  |  |
| **Var(e)** | 0.47 (0.02) | 0.43 to 0.51 |  |  |

PEs = psychotic experiences, NA = negative affect when alone

B = unstandardized point estimate, S.E. = standard error, CI = confidence interval

Ppn = participants, obs = observations

Gender: men as dummy variable; Race: white as dummy variable; Study: EU-GEI dataset as dummy variable

\*= >.05, \*\*= >.001

Subj\_id: number indicating participant/subject

RE = Random Effects parameter

AR = Autoregression

**Table S8**

*Example of data used to analyze association between NA when alone and subsequent PEs*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Beep number** | **Alone** | **NA at t0** | **PEs at t1** |
| 1 | 1 | 0\* | - | - |
| 1 | 2 | - | 2 | 1 |
| 1 | 3 | 1 | - | 3 |
| 1 | 4 | 0 | -\*\* | -\*\* |
| 1 | 5 | 1 | 3 | 4 |
| 1 | 6 | - | - | - |
| 1 | 7 | 0 | - | - |
| 1 | 8 | 1 | 5 | 3 |
| 1 | 9 | 1 | - | - |
| 1 | 10 | 0 | - | - |

NA t0 = negative affect at previous beep

PEs t1 = psychotic experiences at current beep

\*All data in this example are imaginary data from one day

**\*\***We only included observations for NA and PEs when people were alone during the previous assessment. We left out observations if participants were in company or didn’t respond during the previous assessment.