**Supplement**

Table S1. *Linear regression results on affect instability based on CT severity.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affect** | **Any CTa** | | | | | **Mild CTa** | | | | | **Severe CTa** | | | | |
| Betab | SE | p | pFDRc | d | Betab | SE | p | pFDRc | d | Betab | SE | p | pFDRc | d |
|  | **Model 1 – adjustment for age, sex, and education** | | | | | | | | | | | | | | |
| **PA instabilityd** | 0.120 | 0.039 | **0.002** | **0.004** | **0.336** | 0.100 | 0.045 | **0.028** | 0.056 | **0.278** | 0.147 | 0.051 | **0.004** | **0.008** | **0.412** |
| **NA instability** | 0.109 | 0.027 | **<0.001** | **<0.001** | **0.435** | 0.085 | 0.032 | **0.009** | **0.034** | **0.335** | 0.144 | 0.036 | **<0.001** | **<0.001** | **0.580** |
|  | **Model 2 – additional adjustment for mean levels of affect** | | | | | | | | | | | | | | |
| **PA instabilityd** | 0.047 | 0.038 | 0.222 | 0.296 | 0.130 | 0.040 | 0.044 | 0.370 | 0.493 | 0.110 | 0.057 | 0.050 | 0.249 | 0.332 | 0.157 |
| **NA instability** | 0.013 | 0.020 | 0.513 | 0.513 | 0.051 | 0.005 | 0.024 | 0.829 | 0.829 | 0.020 | 0.026 | 0.027 | 0.340 | 0.340 | 0.101 |

*Note.* CT (*n* = 159), mild CT (*n* = 90), severe CT (*n* = 69), no CT (*n* = 187).

a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR p-value < 0.05) adjustment for 4 tests; d Loge-transformed (ln).

Boldface indicates statistical significance (*p* < .05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

# Table S2. *Pearson correlations (r) between sociodemographic and main study variables (n = 346).*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **CT, yes** | **Mean PA** | **Variability**  **PAa** | **Autocorrelation**  **PA** | **Mean NAa** | **Variability**  **NAa** | **Autocorrelation**  **NAb** |
| **Age (years)** | 0.123\* | 0.086 | -0.158\*\* | -0.033 | -0.077 | -0.089 | -0.021 |
| **Sex, male** | -0.091 | -0.007 | -0.167\*\* | -0.037 | 0.077 | -0.041 | 0.028 |
| **Education (years)** | -0.152\*\* | 0.073 | -0.011 | -0.003 | -0.107\* | -0.063 | -0.070 |

*Note:* Categorical variables: point-biserial correlation. \*\*\*p < 0.001, \*\* p < 0.01, \* p <0.05, a – loge-transformed (ln), b data missing for 1 participant. CT, childhood trauma; PA, positive affect; NA, negative affect.

Table S3. *Moderation findings by psychiatric status (lifetime vs. no lifetime disorder) in linear regression analyses.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Affect** | **CTa × lifetime disorder** | | | |
| Betab | SE | p | pFDRc |
|  | **Adjustment for age, sex, education, and psychiatric status** | | | |
| **Mean PA** | 0.176 | 0.272 | 0.519 | 0.934 |
| **Mean NA** | 0.006 | 0.117 | 0.963 | 0.963 |
| **PA variabilityd** | 0.080 | 0.252 | 0.750 | 0.934 |
| **PA autocorrelation** | -0.035 | 0.064 | 0.592 | 0.934 |
| **NA variabilityd** | 0.017 | 0.062 | 0.779 | 0.934 |
| **NA autocorrelation\*** | -0.063 | 0.068 | 0.355 | 0.934 |
|  | **Additional adjustment for mean levels of affect** | | | |
| **PA variabilityd** | 0.133 | 0.239 | 0.579 | 0.736 |
| **PA autocorrelation** | -0.029 | 0.064 | 0.645 | 0.736 |
| **NA variabilityd** | 0.016 | 0.046 | 0.736 | 0.736 |
| **NA autocorrelation\*** | -0.064 | 0.064 | 0.312 | 0.736 |

*Note.* CT (*n* = 159), no CT (*n* = 187).

a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR p-value < 0.05) adjustment; d Loge-transformed (ln); \* Data missing for 1 participant. Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

Table S4. *Linear regression results on affect fluctuations (lifetime disorder).*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affect** | **Any CTa** | | | | |
| Betab | SE | p | pFDRc | d |
|  | **Adjustment for age, sex, and education** | | | | |
| **Mean PA** | -0.285 | 0.099 | **0.004** | **0.018** | **-0.362** |
| **Mean NA** | 0.120 | 0.043 | **0.006** | **0.018** | **0.344** |
| **PA variabilityd** | 0.125 | 0.088 | 0.155 | 0.311 | 0.174 |
| **PA autocorrelation** | -0.016 | 0.022 | 0.458 | 0.513 | -0.091 |
| **NA variabilityd** | 0.023 | 0.023 | 0.318 | 0.476 | 0.122 |
| **NA autocorrelation** | 0.015 | 0.023 | 0.513 | 0.513 | 0.081 |
|  | **Additional adjustment for mean levels of affect** | | | | |
| **PA variabilityd** | 0.049 | 0.085 | 0.568 | 0.727 | 0.068 |
| **PA autocorrelation** | -0.025 | 0.022 | 0.265 | 0.530 | -0.142 |
| **NA variabilityd** | -0.020 | 0.018 | 0.255 | 0.530 | -0.106 |
| **NA autocorrelation** | -0.008 | 0.022 | 0.727 | 0.727 | -0.043 |

*Note.* CT (*n* = 149), no CT (*n* = 123). a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR p-value < 0.05) adjustment; d Loge-transformed (ln); Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

Table S5. *Linear regression results on affect fluctuations (no lifetime disorder).*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affect** | **Any CTa** | | | | |
| Betab | SE | p | pFDRc | d |
|  | **Adjustment for age, sex, and education** | | | | |
| **Mean PA** | -0.503 | 0.202 | **0.015** | **0.092** | **-0.862** |
| **Mean NA** | 0.097 | 0.071 | 0.179 | 0.536 | 0.479 |
| **PA variabilityd** | 0.009 | 0.236 | 0.969 | 0.969 | 0.013 |
| **PA autocorrelation** | 0.011 | 0.064 | 0.862 | 0.969 | 0.061 |
| **NA variabilityd** | -0.002 | 0.030 | 0.944 | 0.969 | -0.023 |
| **NA autocorrelation\*** | 0.060 | 0.070 | 0.394 | 0.787 | 0.304 |
|  | **Additional adjustment for mean levels of affect** | | | | |
| **PA variabilityd** | -0.263 | 0.220 | 0.236 | 0.471 | -0.389 |
| **PA autocorrelation** | -0.003 | 0.067 | 0.969 | 0.969 | 0.017 |
| **NA variabilityd** | -0.032 | 0.021 | 0.129 | 0.471 | -0.378 |
| **NA autocorrelation\*** | 0.026 | 0.066 | 0.699 | 0.932 | 0.131 |

*Note.* CT (*n* = 10), no CT (*n* = 64). a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR p-value < 0.05) adjustment; d Loge-transformed (ln); \* Data missing for 1 participant. Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

Table S6. *Linear regression results on affect fluctuations based on CT types.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affect** | **Emotional neglecta** | | | | | | **Emotional abusea** | | | | | | **Physical abusea** | | | | | **Sexual abusea** | | | | |
| Betab | SE | p | FDRc | d | Betab | | SE | p | FDRc | d | Betab | | SE | p | FDRc | d | Betab | SE | p | FDRc | d |
|  | **Model 1 – adjustment for age, sex, and education** | | | | | | | | | | | | | | | | | | | | | |
| **PA variabilityd** | 0.268 | 0.084 | **0.002** | **0.003** | **0.367** | 0.275 | | 0.099 | **0.006** | **0.012** | **0.372** | 0.189 | | 0.137 | 0.169 | 0.225 | 0.246 | 0.152 | 0.120 | 0.207 | 0.370 | 0.198 |
| **PA autocorrelation** | 0.006 | 0.021 | 0.785 | 0.785 | 0.034 | 0.006 | | 0.024 | 0.795 | 0.795 | 0.034 | -0.019 | | 0.033 | 0.570 | 0.570 | -0.103 | -0.0002 | 0.028 | 0.995 | 0.995 | -0.001 |
| **NA variabilityd** | 0.079 | 0.021 | **<0.001** | **0.001** | **0.429** | 0.076 | | 0.024 | **0.002** | **0.007** | **0.425** | 0.091 | | 0.033 | **0.006** | **0.024** | **0.494** | 0.031 | 0.028 | 0.277 | 0.370 | 0.175 |
| **NA autocorrelation\*** | 0.068 | 0.023 | **0.004** | **0.005** | **0.346** | 0.069 | | 0.027 | **0.011** | **0.014** | **0.349** | 0.071 | | 0.036 | 0.052 | 0.103 | 0.350 | 0.060 | 0.032 | 0.064 | 0.257 | 0.299 |
|  | **Model 2 – additional adjustment for mean levels of affect** | | | | | | | | | | | | | | | | | | | | | |
| **PA variabilityd** | 0.078 | 0.082 | 0.343 | 0.740 | 0.105 | 0.040 | | 0.095 | 0.678 | 0.678 | 0.053 | -0.049 | | 0.128 | 0.699 | 0.905 | -0.063 | 0.002 | 0.113 | 0.984 | 0.984 | 0.003 |
| **PA autocorrelation** | -0.013 | 0.022 | 0.565 | 0.740 | -0.073 | -0.013 | | 0.025 | 0.611 | 0.678 | -0.073 | -0.039 | | 0.034 | 0.252 | 0.905 | -0.212 | -0.012 | 0.029 | 0.678 | 0.904 | -0.068 |
| **NA variabilityd** | -0.005 | 0.016 | 0.740 | 0.740 | -0.027 | -0.013 | | 0.018 | 0.469 | 0.678 | -0.071 | -0.012 | | 0.022 | 0.598 | 0.905 | -0.064 | -0.024 | 0.019 | 0.195 | 0.779 | -0.136 |
| **NA autocorrelation\*** | 0.016 | 0.022 | 0.459 | 0.740 | 0.080 | 0.012 | | 0.025 | 0.633 | 0.678 | 0.060 | 0.004 | | 0.034 | 0.905 | 0.905 | 0.020 | 0.021 | 0.029 | 0.455 | 0.904 | 0.104 |

*Note.* Emotional neglect (*n* = 130), emotional abuse (*n* = 84), physical abuse (*n* = 39), sexual abuse (*n* = 57), no CT (*n* = 187).

a Analyzed in separate models with no CT as reference group; b Unstandardized beta; c multiple testing (FDR p-value < 0.05) adjustment for 4 tests per model; d Loge-transformed (ln); \* Data missing for 1 participant. Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

Table S7. *Moderation findings by mean levels of affect in linear regression analyses.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affect** | **Any CTa × mean PA** | | | | **Any CTa × mean NA** | | | |
| Betab | SE | p | pFDRc | Betab | SE | p | pFDRc |
|  | **Adjustment for age, sex, education, and mean levels of affect** | | | | | | | |
| **PA variabilityd** | 0.304 | 0.090 | **0.001** | **0.001** | - | - | **-** | - |
| **PA autocorrelation** | 0.005 | 0.024 | 0.853 | 0.853 | - | - | - | - |
| **NA variabilityd** | - | - | - | - | -0.151 | 0.041 | **<0.001** | **<0.001** |
| **NA autocorrelation\*** | - | - | - | - | -0.228 | 0.056 | **<0.001** | **<0.001** |

*Note.* CT (*n* = 159), no CT (*n* = 187).

a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR) adjustment for 4 tests; d Loge-transformed (ln); \* Data missing for 1 participant. Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

Table S8. *Moderation findings by mean levels of affect in linear regression analyses (current or remitted disorder only).*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affect** | **Any CTa × mean PA** | | | | **Any CTa × mean NA** | | | |
| Betab | SE | p | pFDRc | Betab | SE | p | pFDRc |
|  | **Adjustment for age, sex, education, and mean levels of affect** | | | | | | | |
| **PA variabilityd** | 0.252 | 0.107 | **0.020** | **0.029** | - | - | **-** | - |
| **PA autocorrelation** | -0.011 | 0.028 | 0.709 | 0.709 | - | - | - | - |
| **NA variabilityd** | - | - | - | - | -0.148 | 0.050 | **0.003** | **0.013** |
| **NA autocorrelation\*** | - | - | - | - | -0.145 | 0.063 | **0.022** | **0.029** |

*Note.* CT (*n* = 149), no CT (*n* = 123).

a Reference group: no CT; b Unstandardized beta; c multiple testing (FDR) adjustment for 4 tests; d Loge-transformed (ln); \* Data missing for 1 participant. Boldface indicates statistical significance (*p* < 0.05). CT, childhood trauma; PA, positive affect; NA, negative affect, SE, standard error.

# Table S9. *Pearson correlations (r) between antidepressant use and main study variables (n = 346).*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **CT, yes** | **Mean PA** | **Variability**  **PAa** | **Autocorrelation**  **PA** | **Mean NAa** | **Variability**  **NAa** | **Autocorrelation**  **NAb** |
| **Antidepressant use, yes** | 0.149\*\* | -0.329\*\*\* | 0.209\*\*\* | 0.126\* | 0.304\*\*\* | 0.307\*\*\* | 0.218\*\*\* |

*Note:* Point-biserial correlation. \*\*\*p < 0.001, \*\* p < 0.01, \* p < 0.05, a – loge-transformed (ln), b data missing for 1 participant. CT, childhood trauma; PA, positive affect; NA, negative affect

**Psychiatric status adjustment**

**2 linear regressions:**

Mean PA~CT (yes/no) + lifetime disorder (yes/no)

Mean NA~CT (yes/no) + lifetime disorder (yes/no)

**Main analysis**

**Model 1**

Covariates: age, sex, education

**Model 2**

Covariates: age, sex, education, mean levels of affect

**CT**

**6 linear regressions:**

Mean PA~CT (yes/no)

Mean NA~CT (yes/no)

PA variability~CT (yes/no)

PA autocorrelation~CT (yes/no)

NA variability~CT (yes/no)

NA autocorrelation~CT (yes/no)

**CT severity**

**4 linear regressions:**

PA variability~CT (mild/no; severe/no)

PA autocorrelation~CT (mild/no; severe/no)

NA variability~CT (mild/no; severe/no)

NA autocorrelation~CT (mild/no; severe/no)

**CT types**

**16 linear regressions:**

PA variability~EN (yes/no)

PA autocorrelation~EN (yes/no)

NA variability~EN (yes/no)

NA autocorrelation~EN (yes/no)

PA variability~EA (yes/no)

PA autocorrelation~EA (yes/no)

NA variability~EA (yes/no)

NA autocorrelation~EA (yes/no)

PA variability~PA (yes/no)

PA autocorrelation~PA (yes/no)

NA variability~PA (yes/no)

NA autocorrelation~PA (yes/no)

PA variability~SA (yes/no)

PA autocorrelation~SA (yes/no)

NA variability~SA (yes/no)

NA autocorrelation~SA (yes/no)

**Moderation by psychiatric status**

**4 linear regressions:**

PA variability~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

PA autocorrelation~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

NA variability~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

NA autocorrelation~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

**CT**

**4 linear regressions:**

PA variability~CT (yes/no)

PA autocorrelation~CT (yes/no)

NA variability~CT (yes/no)

NA autocorrelation~CT (yes/no)

**CT severity**

**4 linear regressions:**

PA variability~CT (mild/no; severe/no)

PA autocorrelation~CT (mild/no; severe/no)

NA variability~CT (mild/no; severe/no)

NA autocorrelation~CT (mild/no; severe/no)

**CT types**

**16 linear regressions:**

PA variability~EN (yes/no)

PA autocorrelation~EN (yes/no)

NA variability~EN (yes/no)

NA autocorrelation~EN (yes/no)

PA variability~EA (yes/no)

PA autocorrelation~EA (yes/no)

NA variability~EA (yes/no)

NA autocorrelation~EA (yes/no)

PA variability~PA (yes/no)

PA autocorrelation~PA (yes/no)

NA variability~PA (yes/no)

NA autocorrelation~PA (yes/no)

PA variability~SA (yes/no)

PA autocorrelation~SA (yes/no)

NA variability~SA (yes/no)

NA autocorrelation~SA (yes/no)

**Moderation by psychiatric status**

**4 linear regressions:**

PA variability~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

PA autocorrelation~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

NA variability~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

NA autocorrelation~CT (yes/no) + lifetime disorder (yes/no) + CT×lifetime disorder

**Moderation by mean level of affect**

**4 linear regressions:**

PA variability~CT (yes/no) + mean PA +

CT×mean PA

PA autocorrelation~CT (yes/no) + mean PA + CT×mean PA

NA variability~CT (yes/no) + mean NA + CT×mean NA

NA autocorrelation~CT (yes/no) + mean NA + CT×mean NA

**Psychiatric status adjustment**

**4 linear regressions:**

PA variability~CT (yes/no) + mean PA + CT×mean PA + lifetime disorder (yes/no)

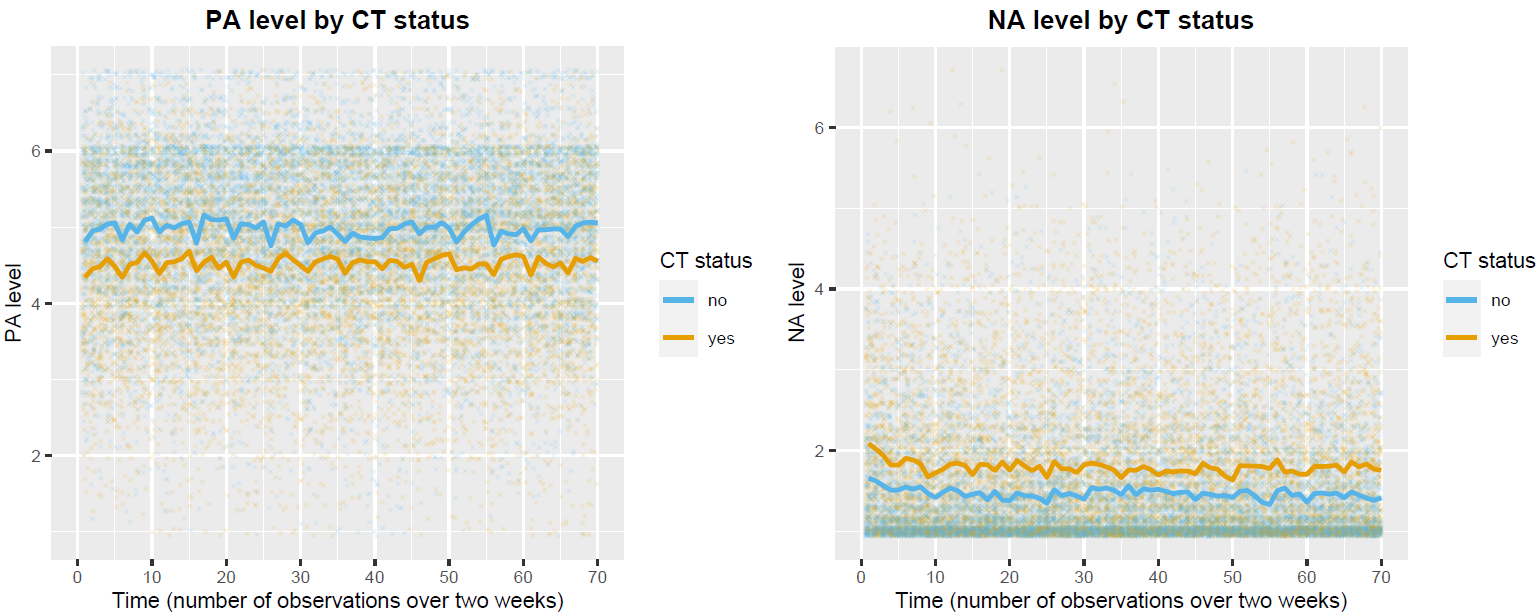
PA autocorrelation~CT (yes/no) + mean PA + CT×mean PA + lifetime disorder (yes/no)

NA variability~CT (yes/no) + mean NA + CT×mean NA + lifetime disorder (yes/no)

NA autocorrelation~CT (yes/no) + mean NA + CT×mean NA + lifetime disorder (yes/no)

*Figure S1.* Analytical steps of the main analysis.

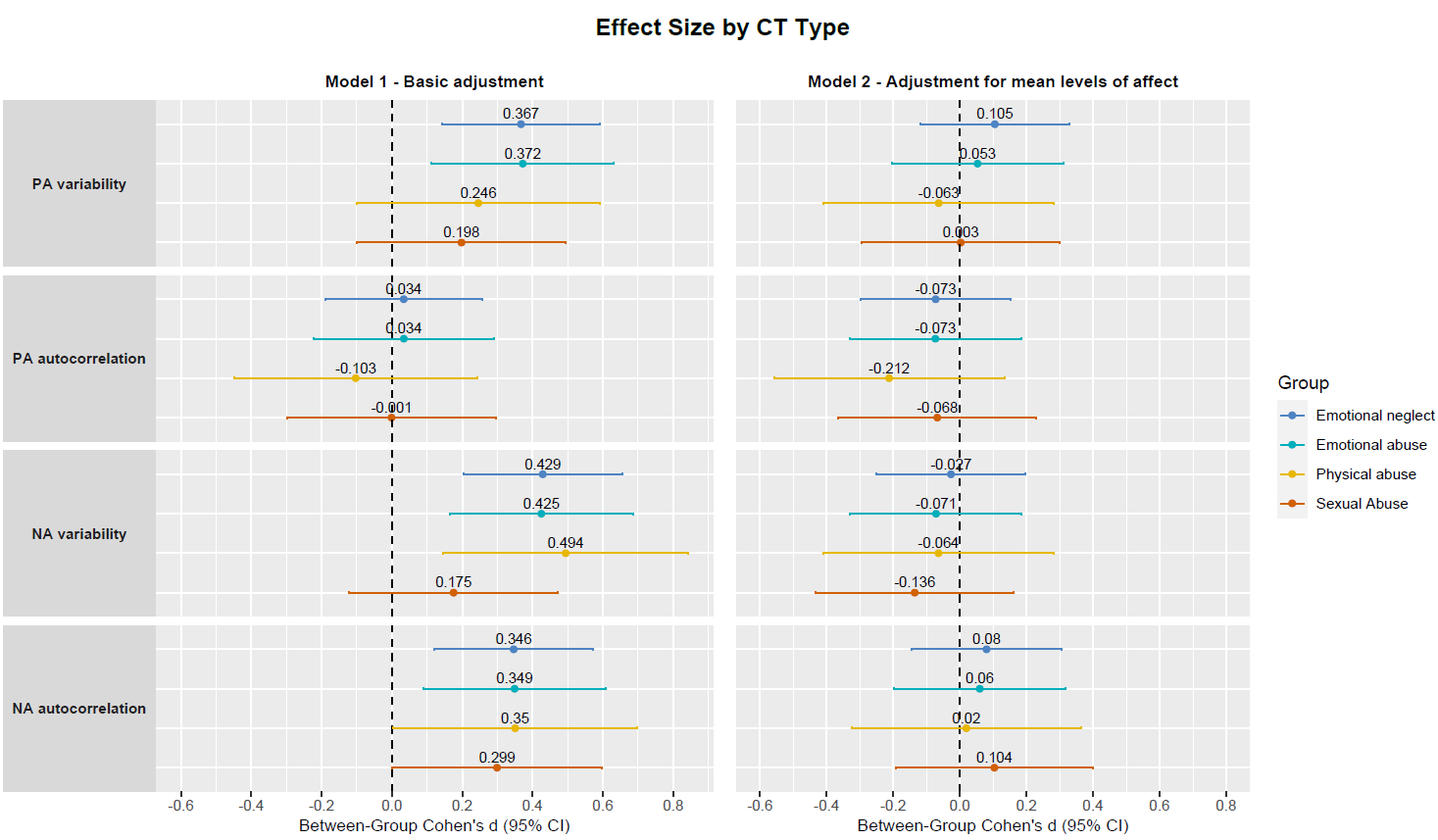
*Note.* PA, positive affect; NA, negative affect; CT, childhood trauma; EN, emotional neglect; EA, emotional abuse; PA, physical abuse; SA, sexual abuse.



*Figure S2.* Visualization of the average PA and NA scores calculated for each timepoint over the two-week observations by CT status.

*Note.* Crosses represent raw mean affect participant scores at each time point.

CT (*n* = 159), no CT (*n* = 187). PA, positive affect; NA, negative affect; CT, childhood trauma

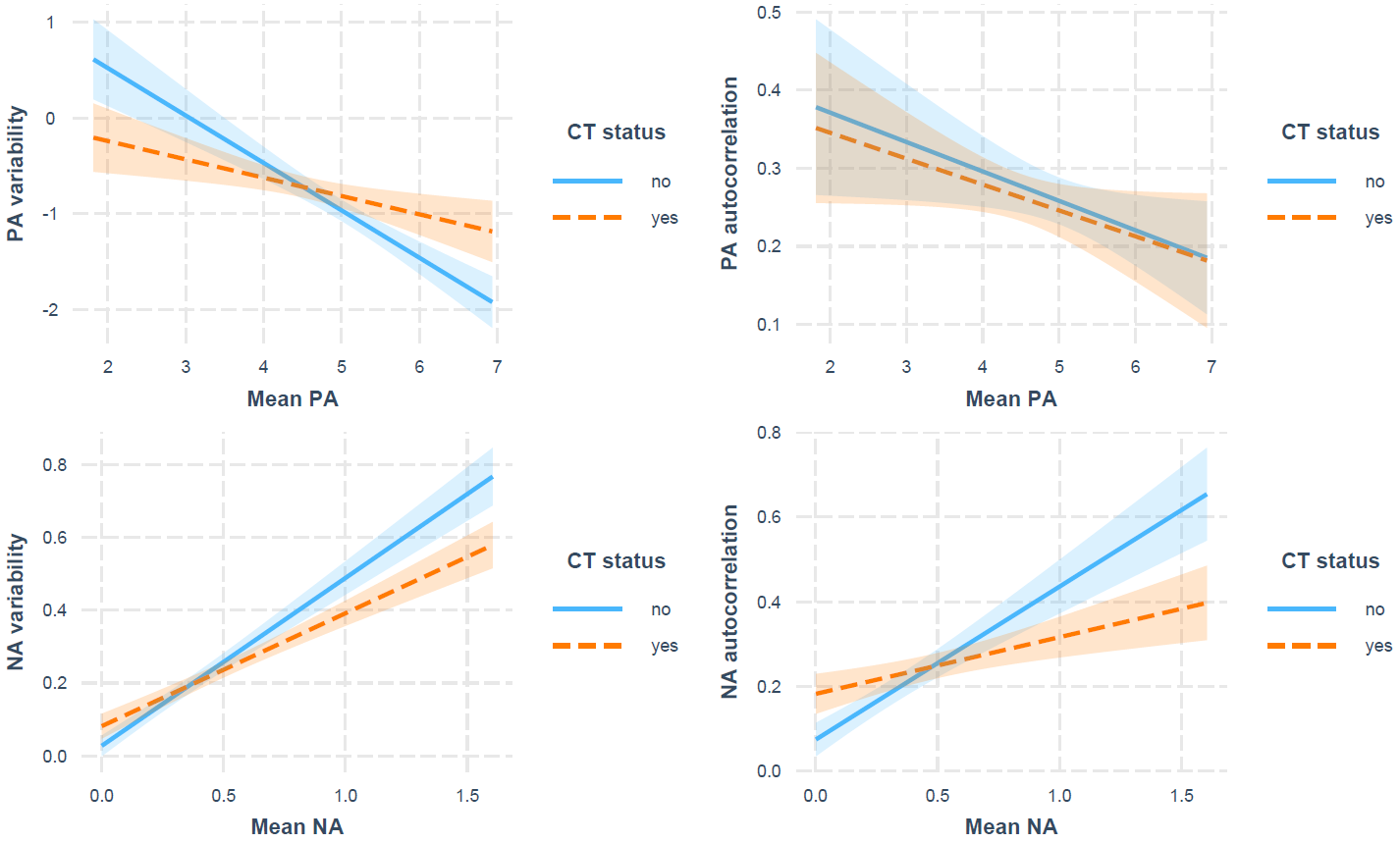


*Figure S3.* Forest plot of between group effect sizes with corresponding 95% confidence intervals (based on unstandardized regression coefficients) of affect fluctuations by CT type (referenced to no CT group).

*Note.* Basic adjustment: age, sex, and education. CT types analyzed in separate models with no CT as reference group.

Emotional neglect (*n* = 130), emotional abuse (*n* = 84), physical abuse (*n* = 39), sexual abuse (*n* = 57), no CT (*n* = 187).

CT, childhood trauma; PA, positive affect; NA, negative affect



*Figure S4.* Association between dynamic affect fluctuations and mean affect levels with 95% confidence intervals according to CT status.

*Note.* Adjusted for age, sex, education. CT, childhood trauma; PA, positive affect; NA, negative affect. Loge-transformed (ln): PA variability, NA variability, mean NA level.