**Dimensions of Child Maltreatment and Longitudinal Diurnal Cortisol Patterns:**

**The Roles of Resilience and Child Sex**

**Supplementary Materials**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table S1**  *Descriptive Statistics for Raw and Transformed Cortisol Values and Indicators and T Tests for Differences in School- versus Home-Collected Samples at W2* | | | | |
|  | Raw value (ng/mL) [*M* (*SD*)] | Transformed value [*M* (*SD*)] | *t* | *p* |
| 1. Sample 1 at W1 | 9.45 (3.67) | 2.29 (0.35) | - | - |
| 2. Sample 2 at W1 | 13.94 (5.18) | 2.65 (0.35) | - | - |
| 3. Sample 3 at W1 | 4.76 (2.97) | 1.65 (0.43) | - | - |
| 4. Sample 4 at W1 | 10.19 (4.20) | 2.35 (0.36) | - | - |
| 5. Sample 5 at W1 | 13.93 (5.51) | 2.64 (0.35) | - | - |
| 6. Sample 6 at W1 | 4.96 (3.23) | 1.68 (0.44) | - | - |
| 7. Sample 7 at W1 | 10.12 (3.86) | 2.35 (0.33) | - | - |
| 8. Sample 8 at W1 | 13.76 (5.42) | 2.63 (0.35) | - | - |
| 9. Sample 9 at W1 | 4.48 (2.65) | 1.61 (0.42) | - | - |
| 1. AC at W1 | - | 2.33 (0.29) | - | - |
| 1. CAR at W1 | - | 0.08 (0.06) | - | - |
| 1. DCS at W1 | - | -0.05 (0.02) | - | - |
| 13. Sample 1 at W2 | 5.11 (3.07) | 1.69 (0.49) | 0.53 | 0.60 |
| 14. Sample 2 at W2 | 8.74 (3.84) | 2.19 (0.44) | 0.70 | 0.49 |
| 15. Sample 3 at W2 | 0.66 (0.68) | 0.45 (0.31) | -2.66 | 0.15 |
| 16. Sample 4 at W2 | 5.18 (2.76) | 1.73 (0.44) | 0.37 | 0.71 |
| 17. Sample 5 at W2 | 8.07 (3.80) | 2.11 (0.45) | -0.24 | 0.81 |
| 18. Sample 6 at W2 | 0.58 (0.46) | 0.42 (0.24) | -1.08 | 0.28 |
| 19. Sample 7 at W2 | 4.92 (2.60) | 1.69 (0.44) | -1.61 | 0.11 |
| 20. Sample 8 at W2 | 8.11 (3.67) | 2.12 (0.43) | 0.24 | 0.81 |
| 21. Sample 9 at W2 | 0.73 (0.83) | 0.48 (0.34) | -0.56 | 0.58 |
| 1. AC at W2 | - | 1.71 (0.36) | -0.87 | 0.39 |
| 1. CAR at W2 | - | 0.11 (0.09) | 0.41 | 0.69 |
| 1. DCS at W2 | - | -0.09 (0.03) | -1.39 | 0.17 |
| *Note.* AC = awakening cortisol, CAR = cortisol awakening response, DCS = diurnal cortisol slope. AC, CAR, and DCS were calculated using transformed cortisol values and mean scores were for cortisol indicators across three days within each wave were used in this table. Raw cortisol values refer to winsorized raw cortisol values. Samples 1-3 refers to cortisol samples collected at the first day, samples 4-6 refers to cortisol samples collected at the second day, samples 7-9 refers to cortisol samples collected at the third day. The *t* and *p* values indicate the results from independent sample *t* tests of whether the raw cortisol values and the three cortisol indicators included in analyses differ in school- (*n* = 14) and home-collected samples at W2 (*n* = 255). | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S2**  *Results of Multilevel Models for the Moderation Effects of Resilience in the Associations Between Abuse and Neglect on Diurnal Cortisol and Sex Differences (N = 312)* | | | | | | | | |
| Fixed effect | AC | |  | CAR | |  | DCS | |
| *B* (*SE*) | *p* |  | *B* (*SE*) | *p* |  | *B* (*SE*) | *p* |
| *Diurnal cortisol at W1* |  |  |  |  |  |  |  |  |
| Intercept | 1.555 (0.226)\*\*\* | < .001 |  | 0.462 (0.039)\*\*\* | < .001 |  | 0.039 (0.018)\* | .031 |
| Child sex | 0.128 (0.033) | < .001 |  | -0.010 (0.007) | .152 |  | 0.004 (0.002) | .105 |
| Age at W1 | 0.001 (0.021) | .970 |  | -0.001 (0.004) | .882 |  | 0.001 (0.002) | .517 |
| SSS at W1 | -0.017 (0.011) | .115 |  | 0.002 (0.002) | .328 |  | 0.000 (0.001) | .794 |
| Abuse at W1 | 0.022 (0.038) | .571 |  | -0.007 (0.007) | .314 |  | -0.001 (0.003) | .719 |
| Neglect at W1 | 0.036 (0.036) | .326 |  | -0.010 (0.006) | .072 |  | -0.003 (0.003) | .185 |
| Resilience at W1 | 0.015 (0.026) | .546 |  | -0.002 (0.005) | .667 |  | -0.003 (0.002) | .171 |
| Abuse×resilience at W1 | 0.018 (0.052) | .721 |  | 0.014 (0.007) | .056 |  | 0.001 (0.003) | .786 |
| Neglect×resilience at W1 | 0.022 (0.036) | .541 |  | 0.006 (0.006) | .320 |  | 0.001 (0.003) | .621 |
| Abuse×child sex at W1 | -0.027 (0.050) | .598 |  | 0.004 (0.012) | .734 |  | -0.002 (0.004) | .623 |
| Neglect×child sex at W1 | 0.035 (0.050) | .485 |  | -0.009 (0.009) | .329 |  | 0.000 (0.004) | .919 |
| Resilience×child sex at W1 | -0.045 (0.035) | .209 |  | -0.003 (0.008) | .674 |  | -0.003 (0.003) | .264 |
| Abuse×resilience×child sex at W1 | -0.110 (0.060) | .068 |  | -0.011 (0.013) | .412 |  | 0.000 (0.004) | .992 |
| Neglect×resilience×child sex at W1 | -0.005 (0.041) | .900 |  | -0.003 (0.008) | .692 |  | -0.003 (0.004) | .413 |
| *Changes in diurnal cortisol from W1 to W2* |  |  |  |  |  |  |  |  |
| Intercept | -1.042 (0.254)\*\* | < .001 |  | 0.089 (0.070) | .208 |  | -0.015 (0.023) | .512 |
| Child sex | 0.011 (0.048) | .811 |  | 0.007 (0.013) | .599 |  | -0.007 (0.004) | .094 |
| Age at W1 | 0.042 (0.023) | .074 |  | -0.007 (0.007) | .256 |  | -0.003 (0.002) | .192 |
| SSS at W1 | -0.002 (0.014) | .906 |  | 0.003 (0.004) | .443 |  | 0.001(0.001) | .601 |
| Abuse at W1 | -0.067 (0.044) | .129 |  | -0.007 (0.011) | .550 |  | 0.003 (0.003) | .321 |
| Neglect at W1 | 0.008 (0.047) | .861 |  | 0.005 (0.012) | .674 |  | 0.001 (0.004) | .899 |
| Resilience at W1 | 0.060 (0.031) | .052 |  | -0.010 (0.009) | .256 |  | -0.004 (0.003) | .090 |
| Abuse×resilience at W1 | 0.022 (0.047) | .639 |  | -0.024 (0.014) | .075 |  | -0.001 (0.004) | .736 |
| Neglect×resilience at W1 | -0.028 (0.052) | .582 |  | -0.003 (0.014) | .860 |  | 0.000 (0.004) | .913 |
| Abuse×child sex at W1 | 0.296 (0.074)\*\*\* | < .001 |  | -0.029 (0.019) | .113 |  | -0.018 (0.005)\*\*\* | < .001 |
| Neglect×child sex at W1 | -0.084 (0.070) | .226 |  | -0.021 (0.019) | .270 |  | 0.001 (0.006) | .871 |
| Resilience×child sex at W1 | -0.080 (0.044) | .070 |  | 0.021 (0.013) | .116 |  | 0.009 (0.004)\* | .022 |
| Abuse×resilience×child sex at W1 | -0.130 (0.071) | .069 |  | 0.053 (0.020)\*\* | .007 |  | 0.014 (0.005)\*\* | .009 |
| Neglect×resilience×child sex at W1 | -0.008 (0.066) | .901 |  | -0.006 (0.017) | .746 |  | 0.001 (0.005) | .789 |
| *Within-person effect* |  |  |  |  |  |  |  |  |
| Wake-up time | 0.126 (0.000)\*\*\* | < .001 |  | -0.064 (0.000)\*\*\* | < .001 |  | -0.017 (0.000)\*\*\* | < .001 |
| *Note*. SSS = Subjective socioeconomic status, AC = awakening cortisol, CAR = cortisol awakening response, DCS = diurnal cortisol slope. Sex was dummy coded as 0 = *boy*, 1 = *girl*.  \* *p*< .05, \*\* *p*< .01, \*\*\**p*< .001. | | | | | | | | |

**Figure S1.** *Density Plots for Abuse (A) and Neglect (B) in Boys and Girls to Demonstrate Data Distribution.*

*Note*. The y-axes represent the probability density function for the kernel density estimation (bandwidth = 0.5). The peaks in the plots denote where values are concentrated over the interval.