## <TC> Table S.1. *Child diurnal cortisol measures: descriptive statistics and mean sampling time of valid samples*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total | | Prenatal depressive symptomsa | | | | | Nonexposed vs. exposed | | |
|  | Nonexposed | | | Exposed | |
|  | *n* | Mean (*SD*) | *n* | Mean (*SD*) | *n* | | Mean (*SD*) | *t*(79–144) | *p* | *d* |
| Cortisol levels (nmol/l) | | | | | | | | | |  |
| T1 | 99 | 17.86 (9.06) | 68 | 17.62 (9.22) | 31 | | 18.38 (8.82) | 0.39 | .700 | 0.09 |
| T2 | 95 | 19.81 (8.38) | 67 | 17.85 (7.68) | 28 | | 24.52 (8.24) | 3.78\*\* | <.001 | 0.85 |
| T3 | 144 | 5.58 (2.35) | 100 | 5.45 (2.36) | 44 | | 5.89 (2.32) | 1.04 | .302 | 0.19 |
| T4 | 145 | 3.81 (1.66) | 101 | 3.82 (1.71) | 44 | | 3.80 (1.57) | 0.07 | .942 | 0.01 |
| T5 | 145 | 1.83 (0.99) | 101 | 1.86 (0.90) | 44 | | 1.76 (1.17) | 0.54 | .543 | 0.10 |
| Sampling time information | | | | | | | | | |  |
| Awakening time | 133 | 07:30 (0:59) | 91 | 07:18 (0:54) | 42 | | 07:55 (1:02) | 3.49\*\* | .001 | 0.65 |
| Time T1 | 99 | 07:40 (1:00) | 68 | 07:28 (0:55) | 31 | | 08:06 (1:04) | 2.97\*\* | .004 | 0.64 |
| Time T2 | 95 | 08:11 (1:01) | 67 | 07:59 (0:55) | 28 | | 08:40 (1:07) | 3.07\*\* | .003 | 0.69 |
| Time T3 | 144 | 12:36 (1:06) | 100 | 12:34 (1:07) | 44 | | 12:40 (1:02) | 0.55 | .587 | 0.10 |
| Time T4 | 145 | 17:21 (0:44) | 101 | 17:22 (0:45) | 44 | | 17:19 (0:40) | 0.36 | .716 | 0.07 |
| Time T5 | 145 | 20:27 (0:58) | 101 | 20:28 (1:00) | 44 | | 20:27 (0:55) | 0.07 | .941 | 0.01 |
| Awakening– T1 (min) | 99 | 6.67 (5.12) | 68 | 6.26 (5.32) | 31 | | 7.55 (4.62) | 1.16 | .250 | 0.25 |
| T1–T5 (hr) | 145 | 12.75 (1.34) | 101 | 12.93 (1.33) | 44 | | 12.32 (1.31) | 2.55\* | .012 | 0.46 |

(continued)

**Table S.1** (continued)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total | | Prenatal depressive symptoms (EPDS)a | | | | | Nonexposed vs. exposed | | |
|  | Nonexposed | | | Exposed | |
|  | *n* | Mean (*SD*) | *n* | Mean (*SD*) | | *n* | Mean (*SD*) | *t* (79–144) | *p* | *d* |
| Diurnal cortisol parametersb | | | | | | | | | |  |
| Waking cortisol | 99 | 2.81 (0.56) | 68 | | 2.79 (0.58) | 31 | 2.85 (0.51) | 0.54 | .589 | 0.12 |
| Bedtime cortisol | 145 | 0.99 (0.33) | 101 | | 1.00 (0.31) | 44 | 0.95 (0.37) | 1.00 | .318 | 0.18 |
| CAR | 81 | 0.05 (0.17) | 56 | | 0.03 (0.18) | 25 | 0.08 (0.16) | 1.11 | .269 | 0.27 |
| Diurnal slope | 99 | –0.13 (0.05) | 68 | | –0.13 (0.05) | 31 | –0.14 (0.05) | 1.44 | .154 | 0.31 |
| Total release | 145 | 23.40 (3.96) | 101 | | 23.62 (3.95) | 44 | 22.91 (3.97) | 1.00 | .319 | 0.18 |

<TFN> *Note:* Default sampling times: T1, at awakening. T2, 30 min after awakening. T3, 12 a.m. T4, 5 p.m. T5, at bedtime. Exclusion of participants due to diseases, medication, or technical problems. Exclusion of T1 samples with >15 min since awakening from analyses of waking cortisol, CAR, and diurnal slope analyses. Exclusion of T2 samples with <15 min or >45 min since awakening from CAR analyses. CAR, cortisol awakening response. Total release, total cortisol release throughout the day.All *t* statisticsand *p* values refer to the independent *t* test, with *t* scores displayed as absolute values. Cohen *d* indicate effect size: *d* = 0.2-0.5 small effect, *d* = 0.5-0.8 medium effect, *d* > 0.8 large effect (Cohen, 1988). aPrenatal EPDS (Edinburgh Postnatal Depression Scale; Cox et al., 1987) score <10 interpreted as nonexposed, ≥10 as exposed. bbased on ln-transformed raw cortisol values. \**p* < .05. \*\**p* < .01.

## <TC> Table S.2. *Correlations between child cortisol parameters and potential covariates*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Waking cortisol  (*n* = 99) | Bedtime cortisol  (*n* = 145) | CAR  (*n* = 81) | Diurnal slope  (*n* = 99) | Total release  (*n* = 145) |
| SES | .138 | –.018 | .056 | –.127 | .118 |
| Agea | .136 | .007 | –.005 | –.175 | .051 |
| Sex | .007 | –.034 | –.060 | –.027 | –.022 |
| Emotional problems (SDQ) | .068 | .050 | –.171 | –.045 | –.087 |
| Conduct problems (SDQ) | .158 | .100 | –.068 | –.020 | .022 |
| Gestational age | .360 | .825 | .793 | .231 | .766 |
| Birth weight | .398 | .306 | .291 | .483 | .079 |
| Apgar | .169 | –.206\* | –.036 | –.276\*\* | –.045 |
| Alcohol consumption pre | –.012 | –.038 | –.152 | –.082 | –.047 |
| Cigarette smoking pre | –.065 | –.012 | .038 | .035 | –.100 |
| Antibiotica intake | .216\* | –.079 | –.040 | –.169 | .042 |
| School day | –.144 | .081 | –.044 | .137 | –.341\*\* |
| Time awakening (T1) | .006 | .095 | .105 | –.023 | –.220\*\* |
| Time (T1–T5) | –.028 | –.235\*\* | .252\* | .119 | .641\*\* |
| EPDS post | .017 | .034 | –.019 | .012 | –.001 |
| EPDS current | –.058 | .108 | .001 | .078 | .074 |

<TFN> *Note:* Correlations are Pearson product–moment–correlation coefficients. CAR, cortisol awakening response. Total release, total cortisol release throughout the day. SES, socioeconomic family status. SDQ, Strength and Difficulties Questionnaire (Goodman, 2001). EPDS, Edinburgh Postnatal Depression Scale (Cox et al., 1987). Pre, prenatal; post, postpartum. aAt time of cortisol and DNA sampling. \**p* < .05. \*\**p* < .01.

## <TC> Table S.3. *Effects of exposure to prenatal depressive symptoms and sex on diurnal cortisol parameters: Results of ANCOVAs*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | ME EPDSpre | | | ME sex | | | IA EPDSpre × Sex | | |
|  | *n* | *F* | *p* | ηp2 | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| Waking cortisola,b | 99 | 1.92 | .169 | .02 | 0.10 | .756 | .00 | 1.19 | .278 | .01 |
| Bedtime cortisolc,d | 145 | 9.47\*\* | .003 | .07 | 0.80 | .372 | .01 | 4.35\* | .039 | .03 |
| CARa | 81 | 1.29 | .260 | .02 | 0.00 | .951 | .00 | 0.54 | .465 | .01 |
| Diurnal slopec,d | 99 | 5.36\* | .023 | .06 | 0.18 | .670 | .00 | 1.94 | .167 | .02 |
| Total releasec,e | 145 | 0.03 | .859 | .00 | 0.23 | .632 | .00 | 5.62\* | .019 | .04 |

<TFN> *Note:* Models were adjusted for maternal postpartum and current depressive symptoms as well as specific covariates for the cortisol parameters (atime between awakening and first sample, bantibiotic intake in the 6 months before sample collection, ctime between first and last sample, dmean Apgar score, eschool day: yes/no). ME, main effect; IA, interaction effect. EPDS, Edinburgh Postnatal Depression Scale (Cox et al., 1987). EPDSpre, exposure to prenatal depressive symptoms (EPDS score ≥10) or no exposure (<10). CAR, cortisol awakening response. Total release, total cortisol release throughout day. \**p* < .05, \*\**p* < .01.

## <TC> Table S.4. *Sex-specific effects of exposure to prenatal depressive symptoms on diurnal cortisol parameters and DNA methylation: Results of post hoc ANCOVAs, separately for the nonexposed and exposed group*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Diurnal cortisol parameters | | | Boys vs. girls | | | | | |
|  | |  | Nonexposeda  (*n* = 101) | | | Exposeda  (*n* = 44) | | |
|  | |  | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| Bedtime cortisolb.c | | | 1.56 | .215 | .02 | 2.80 | .103 | .07 |
| Total releaseb.d | | | 2.97 | .088+ | .03 | 3.28 | .078+ | .08 |
| DNA methylation | | | Boys vs. girls | | | | | |
|  | | | Nonexposeda  (*n* = 117) | | | Exposeda  (*n* = 50) | | |
| Gene | CpG | | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| *NR3C1* | cg04111177 | | 1.60 | .208 | .01 | 3.54 | .066+ | .07 |
| *NR3C1* | cg27107893 | | 1.10 | .297 | .01 | 3.25 | .080+ | .09 |
| *SLC6A4* | cg26741280 | | 1.09 | .298 | .01 | 3.06 | .087+ | .06 |

<TFN> *Note:* Total release, total cortisol release throughout day. aPrenatal EPDS (Edinburgh Postnatal Depression Scale; Cox et al., 1987) score <10 interpreted as nonexposed, ≥10 as exposed. Models were adjusted for maternal postpartum and current depressive symptoms as well as specific covariates for the cortisol parameters: btime between first and last sample, cmean Apgar score, dschool day (yes/no). +*p* < .10.

## <TC> Table S.5*. Effects of exposure to prenatal depressive symptoms and sex on DNA methylation: Results of ANCOVAs*

|  |  |  | ME EPDSpre | | | IA EPDSpre × Sex | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gene | CpG | Position | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| *BDNF* | cg01225698 | Chr11: 27742355 | 3.68 | .057 | .02 | 0.00 | .957 | .00 |
| *BDNF* | cg02527472 | Chr11: 27743348 | 0.87 | .352 | .01 | 1.05 | .308 | .01 |
| *BDNF* | cg02613510 | Chr11: 27723790 | 0.37 | .546 | .00 | 0.06 | .805 | .00 |
| *BDNF* | cg03167496 | Chr11: 27743619 | 3.30 | .071 | .02 | 0.06 | .811 | .00 |
| *BDNF* | cg03747251 | Chr11: 27722722 | 0.08 | .774 | .00 | 0.14 | .706 | .00 |
| *BDNF* | cg03984780 | Chr11: 27722617 | 0.04 | .839 | .00 | 0.68 | .411 | .00 |
| *BDNF* | cg04106006 | Chr11: 27742454 | 0.13 | .721 | .00 | 0.00 | .955 | .00 |
| *BDNF* | cg04481212 | Chr11: 27740495 | 0.27 | .606 | .00 | 2.45 | .120 | .02 |
| *BDNF* | cg04672351 | Chr11: 27722889 | 1.28 | .260 | .01 | 1.37 | .244 | .01 |
| *BDNF* | cg05218375 | Chr11: 27723218 | 0.20 | .652 | .00 | 2.57 | .111 | .02 |
| *BDNF* | cg06684850 | Chr11: 27742369 | 1.92 | .168 | .01 | 0.03 | .864 | .00 |
| *BDNF* | cg06816235 | Chr11: 27742219 | 0.33 | .565 | .00 | 0.00 | .983 | .00 |
| *BDNF* | cg07704699 | Chr11: 27742832 | 0.98 | .324 | .01 | 2.36 | .126 | .01 |
| *BDNF* | cg10022526 | Chr11: 27744557 | 3.39 | .067 | .02 | 0.08 | .780 | .00 |
| *BDNF* | cg10635145 | Chr11: 27742435 | 0.13 | .723 | .00 | 0.52 | .471 | .00 |
| *BDNF* | cg11718030 | Chr11: 27744363 | 0.39 | .535 | .00 | 1.11 | .294 | .01 |
| *BDNF* | cg11806762 | Chr11: 27732958 | 0.11 | .741 | .00 | 0.17 | .681 | .00 |
| *BDNF* | cg15462887 | Chr11: 27744049 | 1.16 | .283 | .01 | 0.01 | .925 | .00 |
| *BDNF* | cg17413943 | Chr11: 27739827 | 0.13 | .725 | .00 | 0.48 | .490 | .00 |
| *BDNF* | cg18595174 | Chr11: 27701991 | 0.41 | .523 | .00 | 0.62 | .431 | .00 |
| *BDNF* | cg20108357 | Chr11: 27718978 | 0.06 | .812 | .00 | 0.95 | .330 | .01 |
| *BDNF* | cg23497217 | Chr11: 27723214 | 0.01 | .944 | .00 | 0.16 | .693 | .00 |
| *BDNF* | cg23619332 | Chr11: 27722060 | 0.09 | .765 | .00 | 0.38 | .537 | .00 |
| *BDNF* | cg24065044 | Chr11: 27723409 | 0.04 | .835 | .00 | 0.51 | .477 | .00 |
| *BDNF* | cg24249411 | Chr11: 27744759 | 0.55 | .458 | .00 | 2.56 | .112 | .02 |
| *BDNF* | cg25457956 | Chr11: 27743664 | 0.08 | .782 | .00 | 0.21 | .649 | .00 |
| *BDNF* | cg25962210 | Chr11: 27721222 | 0.33 | .568 | .00 | 0.66 | .416 | .00 |
| *BDNF* | cg26840770 | Chr11: 27723290 | 0.21 | .651 | .00 | 0.06 | .802 | .00 |
| *BDNF* | cg26949694 | Chr11: 27742060 | 0.03 | .862 | .00 | 0.48 | .491 | .00 |
| *BDNF* | cg27351358 | Chr11: 27743258 | 0.10 | .756 | .00 | 0.85 | .359 | .01 |
| *BDNF* | cg09606766 | Chr11: 27722971 | 3.32 | .070 | .02 | 1.02 | .314 | .01 |
| *BDNF* | cg01583131 | Chr11: 27744675 | 0.00 | .969 | .00 | 0.11 | .738 | .00 |
| *BDNF* | cg06260077 | Chr11: 27721350 | 0.29 | .592 | .00 | 0.31 | .579 | .00 |
| *BDNF* | cg07159484 | Chr11: 27722523 | 0.09 | .769 | .00 | 3.44 | .065 | .02 |
| *BDNF* | cg11241206 | Chr11: 27723128 | 0.01 | .917 | .00 | 0.00 | .954 | .00 |

(continued)

**Table S.5** (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | ME EPDSpre | | | IA EPDSpre × Sex | | |
| Gene | CpG | Position | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| *BDNF* | cg22043168 | Chr11: 27741077 | 1.44 | .233 | .01 | 0.27 | .602 | .00 |
| *BDNF* | cg24377657 | Chr11: 27723245 | 1.48 | .226 | .01 | 3.55 | .061 | .02 |
| *BDNF* | cg25412831 | Chr11: 27742138 | 1.54 | .216 | .01 | 0.09 | .770 | .00 |
| *BDNF* | cg27193031 | Chr11: 27721088 | 0.45 | .504 | .00 | 0.53 | .467 | .00 |
| *CRHR1* | cg00022871 | Chr17: 43884358 | 0.95 | .332 | .01 | 0.02 | .884 | .00 |
| *CRHR1* | cg00025823 | Chr17: 43909151 | 0.07 | .790 | .00 | 1.17 | .281 | .01 |
| *CRHR1* | cg07778819 | Chr17: 43862927 | 0.53 | .466 | .00 | 0.94 | .333 | .01 |
| *CRHR1* | cg08929103 | Chr17: 43860355 | 0.53 | .467 | .00 | 0.04 | .849 | .00 |
| *CRHR1* | cg16642545 | Chr17: 43878769 | 2.05 | .154 | .01 | 0.86 | .355 | .01 |
| *CRHR1* | cg16830379 | Chr17: 43912434 | 0.00 | .959 | .00 | 0.32 | .574 | .00 |
| *CRHR1* | cg18757974 | Chr17: 43860691 | 1.85 | .176 | .01 | 1.55 | .216 | .01 |
| *CRHR1* | cg24063856 | Chr17: 43863303 | 0.14 | .705 | .00 | 0.15 | .700 | .00 |
| *CRHR1* | cg24353392 | Chr17: 43862247 | 0.58 | .447 | .00 | 0.34 | .559 | .00 |
| *CRHR1* | cg24394631 | Chr17: 43863000 | 0.10 | .749 | .00 | 3.83 | .052 | .02 |
| *CRHR1* | cg27410679 | Chr17: 43866278 | 0.07 | .794 | .00 | 1.40 | .238 | .01 |
| *CRHR1* | cg27551605 | Chr17: 43862910 | 1.60 | .208 | .01 | 0.75 | .387 | .01 |
| *CRHR1* | cg27503360 | Chr17: 43890749 | 3.31 | .071 | .02 | 1.86 | .174 | .01 |
| *CRHR1* | cg04856689 | Chr17: 43862032 | 0.00 | .975 | .00 | 1.81 | .180 | .01 |
| *CRHR1* | cg26656751 | Chr17: 43910226 | 0.15 | .701 | .00 | 1.27 | .261 | .01 |
| *FKBP5* | cg00052684 | Chr6: 35694245 | 0.52 | .472 | .00 | 0.29 | .590 | .00 |
| *FKBP5* | cg00130530 | Chr6: 35657202 | 0.11 | .742 | .00 | 0.69 | .406 | .00 |
| *FKBP5* | cg00610228 | Chr6: 35695934 | 0.18 | .676 | .00 | 0.02 | .883 | .00 |
| *FKBP5* | cg01294490 | Chr6: 35656906 | 2.81 | .095 | .02 | 0.23 | .632 | .00 |
| *FKBP5* | cg02665568 | Chr6: 35544468 | 0.35 | .553 | .00 | 0.80 | .371 | .01 |
| *FKBP5* | cg03546163 | Chr6: 35654363 | 0.00 | .989 | .00 | 3.69 | .056 | .02 |
| *FKBP5* | cg03591753 | Chr6: 35659141 | 0.33 | .567 | .00 | 0.39 | .534 | .00 |
| *FKBP5* | cg06087101 | Chr6: 35551932 | 2.99 | .086 | .02 | 1.99 | .160 | .01 |
| *FKBP5* | cg07061368 | Chr6: 35631736 | 0.13 | .722 | .00 | 0.02 | .877 | .00 |
| *FKBP5* | cg07633853 | Chr6: 35569471 | 0.60 | .439 | .00 | 3.38 | .068 | .02 |
| *FKBP5* | cg08586216 | Chr6: 35612351 | 0.23 | .632 | .00 | 1.19 | .278 | .01 |
| *FKBP5* | cg08636224 | Chr6: 35657921 | 0.03 | .868 | .00 | 1.36 | .245 | .01 |
| *FKBP5* | cg08915438 | Chr6: 35697759 | 1.30 | .256 | .01 | 0.01 | .932 | .00 |
| *FKBP5* | cg10300814 | Chr6: 35565116 | 0.10 | .752 | .00 | 0.79 | .376 | .01 |
| *FKBP5* | cg14284211 | Chr6: 35570224 | 0.31 | .581 | .00 | 0.05 | .829 | .00 |
| *FKBP5* | cg14642437 | Chr6: 35652521 | 1.03 | .312 | .01 | 0.03 | .855 | .00 |
| *FKBP5* | cg16012111 | Chr6: 35656758 | 0.80 | .374 | .01 | 0.80 | .371 | .01 |

(continued)

**Table S.5** (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | ME EPDSpre | | | IA EPDSpre × Sex | | |
| Gene | CpG | Position | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| *FKBP5* | cg16052510 | Chr6: 35603143 | 0.32 | .572 | .00 | 0.33 | .569 | .00 |
| *FKBP5* | cg17085721 | Chr6: 35645341 | 1.04 | .310 | .01 | 0.02 | .878 | .00 |
| *FKBP5* | cg19014730 | Chr6: 35635985 | 1.62 | .205 | .01 | 0.93 | .337 | .01 |
| *FKBP5* | cg19226017 | Chr6: 35697185 | 0.08 | .779 | .00 | 0.14 | .710 | .00 |
| *FKBP5* | cg20813374 | Chr6: 35657180 | 0.04 | .835 | .00 | 0.75 | .389 | .01 |
| *FKBP5* | cg25114611 | Chr6: 35696870 | 2.56 | .111 | .02 | 0.01 | .930 | .00 |
| *FKBP5* | cg00140191 | Chr6: 35656242 | 1.37 | .244 | .01 | 0.00 | .998 | .00 |
| *FKBP5* | cg15929276 | Chr6: 35687457 | 0.11 | .741 | .00 | 0.28 | .596 | .00 |
| *FKBP5* | cg18726036 | Chr6: 35543610 | 2.73 | .101 | .02 | 0.20 | .658 | .00 |
| *NR3C1* | cg03857453 | Chr5: 142729913 | 1.25 | .266 | .01 | 2.80 | .096 | .02 |
| ***NR3C1*** | **cg04111177** | **Chr5: 142783607** | **1.11** | **.294** | **.01** | **4.73\*** | **.031** | **.03** |
| *NR3C1* | cg06613263 | Chr5: 142779552 | 1.28 | .259 | .01 | 0.06 | .804 | .00 |
| *NR3C1* | cg07528216 | Chr5: 142788776 | 0.50 | .480 | .00 | 0.10 | .749 | .00 |
| ***NR3C1*** | **cg07733851** | **Chr5: 142781498** | **4.68\*** | **.032** | **.03** | **0.22** | **.644** | **.00** |
| *NR3C1* | cg08818984 | Chr5: 142814827 | 1.41 | .237 | .01 | 1.64 | .202 | .01 |
| *NR3C1* | cg08845721 | Chr5: 142780693 | 2.43 | .121 | .02 | 0.01 | .919 | .00 |
| *NR3C1* | cg12466613 | Chr5: 142815469 | 0.13 | .717 | .00 | 0.87 | .354 | .01 |
| *NR3C1* | cg13648501 | Chr5: 142785258 | 0.26 | .609 | .00 | 0.76 | .385 | .01 |
| *NR3C1* | cg16586394 | Chr5: 142757011 | 0.06 | .800 | .00 | 0.23 | .629 | .00 |
| *NR3C1* | cg18484679 | Chr5: 142740314 | 0.15 | .700 | .00 | 1.47 | .227 | .01 |
| *NR3C1* | cg18849621 | Chr5: 142784382 | 0.13 | .719 | .00 | 0.11 | .741 | .00 |
| *NR3C1* | cg19457823 | Chr5: 142692961 | 1.69 | .196 | .01 | 0.02 | .877 | .00 |
| *NR3C1* | cg23273257 | Chr5: 142658828 | 0.07 | .796 | .00 | 1.17 | .282 | .01 |
| *NR3C1* | cg25535999 | Chr5: 142757312 | 2.07 | .152 | .01 | 2.97 | .087 | .02 |
| *NR3C1* | cg26720913 | Chr5: 142814934 | 0.06 | .805 | .00 | 0.02 | .891 | .00 |
| ***NR3C1*** | **cg27107893** | **Chr5: 142776274** | **0.12** | **.731** | **.00** | **4.74\*** | **.031** | **.03** |
| *NR3C1* | cg27345592 | Chr5: 142786405 | 0.04 | .852 | .00 | 0.00 | .963 | .00 |
| *NR3C1* | cg06952416 | Chr5: 142781736 | 1.50 | .223 | .01 | 0.18 | .669 | .00 |
| *NR3C1* | cg06968181 | Chr5: 142784323 | 0.03 | .867 | .00 | 0.03 | .867 | .00 |
| *NR3C1* | cg27122725 | Chr5: 142781723 | 0.04 | .841 | .00 | 1.01 | .316 | .01 |
| *NR3C2* | cg02534661 | Chr4: 149364543 | 0.64 | .425 | .00 | 1.20 | .275 | .01 |
| *NR3C2* | cg05075176 | Chr4: 149362761 | 0.00 | .957 | .00 | 0.01 | .928 | .00 |
| *NR3C2* | cg05437692 | Chr4: 149362435 | 0.18 | .676 | .00 | 3.22 | .075 | .02 |
| *NR3C2* | cg07275757 | Chr4: 149189974 | 0.05 | .820 | .00 | 0.85 | .358 | .01 |
| *NR3C2* | cg07760722 | Chr4: 149033953 | 0.01 | .939 | .00 | 0.55 | .459 | .00 |
| *NR3C2* | cg10207656 | Chr4: 149019526 | 2.32 | .129 | .01 | 0.25 | .617 | .00 |

(continued)

**Table S.5** (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | ME EPDSpre | | | IA EPDSpre × Sex | | |
| Gene | CpG | Position | *F* | *p* | ηp2 | *F* | *p* | ηp2 |
| ***NR3C2*** | **cg10288772** | **Chr4: 149363461** | **6.51\*** | **.012** | **.04** | **1.01** | **.318** | **.01** |
| *NR3C2* | cg10590842 | Chr4: 149083955 | 2.02 | .157 | .01 | 3.38 | .068 | .02 |
| *NR3C2* | cg12841684 | Chr4: 149251768 | 0.30 | .586 | .00 | 0.19 | .663 | .00 |
| *NR3C2* | cg13000004 | Chr4: 149074093 | 0.09 | .759 | .00 | 0.13 | .722 | .00 |
| *NR3C2* | cg13996731 | Chr4: 149363522 | 1.38 | .242 | .01 | 0.86 | .356 | .01 |
| *NR3C2* | cg16692923 | Chr4: 149364700 | 0.89 | .347 | .01 | 0.19 | .667 | .00 |
| *NR3C2* | cg20140452 | Chr4: 149363715 | 2.30 | .085 | .02 | 0.83 | .364 | .01 |
| *NR3C2* | cg27460943 | Chr4: 149362809 | 2.27 | .134 | .01 | 0.00 | .971 | .00 |
| *NR3C2* | cg02471166 | Chr4: 149244985 | 0.36 | .551 | .00 | 0.15 | .703 | .00 |
| *SLC6A4* | cg01330016 | Chr17: 28549806 | 2.40 | .123 | .02 | 0.01 | .928 | .00 |
| *SLC6A4* | cg03363743 | Chr17: 28562474 | 0.00 | .973 | .00 | 0.07 | .795 | .00 |
| *SLC6A4* | cg05951817 | Chr17: 28562142 | 0.15 | .703 | .00 | 0.03 | .856 | .00 |
| ***SLC6A4*** | **cg18584905** | **Chr17: 28563300** | **5.19\*** | **.024** | **.03** | **0.21** | **.649** | **.00** |
| *SLC6A4* | cg20592995 | Chr17: 28524160 | 3.41 | .067 | .02 | 0.01 | .939 | .00 |
| *SLC6A4* | cg22584138 | Chr17: 28562220 | 0.01 | .943 | .00 | 1.10 | .297 | .01 |
| *SLC6A4* | cg26126367 | Chr17: 28559497 | 2.11 | .148 | .01 | 0.29 | .594 | .00 |
| ***SLC6A4*** | **cg26741280** | **Chr17: 28563089** | **3.11** | **.080** | **.02** | **4.28\*** | **.040** | **.03** |
| *SLC6A4* | cg06841846 | Chr17: 28564094 | 0.58 | .448 | .00 | 0.16 | .695 | .00 |
| *SLC6A4* | cg12074493 | Chr17: 28564117 | 0.68 | .411 | .00 | 0.46 | .497 | .00 |

<TFN> *Note:* *n* = 144–167 due to excluded methylation values of single CpGs. Maternal postpartum and current depressive symptoms were included as covariates. ME, main effect; IA, interaction effect. EPDS, Edinburgh Postnatal Depression Scale (Cox et al., 1987). EPDSpre, exposure to prenatal depressive symptoms (EPDS score ≥10) or no exposure (<10). Differentially methylated CpGs with marginal significance are highlighted in **bold face**. \**p* < .05. \*\**p* < .01, not Bonferroni adjusted.

## <TC> Table S.6. *DNA methylation as predictor of diurnal cortisol parameters: Results of multiple regression models*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Diurnal cortisol slopea,b | | | | | | | | |
| Gene | CpG | All  (*n* = 99) | | | Boys  (*n* = 44) | | | Girls  (*n* = 55) | | |
| β | *t* | *p* | β | *t* | *p* | β | *t* | *p* |
| *NR3C1* | cg04111177 | –.08 | –0.80 | .426 | –.13 | –0.83 | .410 | –.03 | –0.24 | .815 |
| *NR3C1* | cg07733851 | –.10 | –0.97 | .332 | –.03 | –0.17 | .869 | –.12 | –0.92 | .364 |
| *NR3C1* | cg27107893 | –.07 | –0.62 | .536 | –.25 | –1.50 | .143 | .07 | 0.54 | .592 |
| *NR3C2* | cg10288772 | –.06 | –0.57 | .568 | .07 | 0.46 | .647 | –.16 | –1.27 | .211 |
| *SLC6A4* | cg18584905 | –.01 | –0.11 | .916 | .10 | 0.63 | .534 | –.11 | –0.84 | .407 |
| *SLC6A4* | cg26741280 | .06 | 0.60 | .551 | .07 | 0.46 | .647 | .04 | 0.32 | .754 |
|  |  | Bedtime cortisola,b | | | | | | | | |
|  |  | All  (*n* = 145) | | | Boys  (*n* = 71) | | | Girls  (*n* = 74) | | |
| Gene | CpG | β | *t* | *p* | β | *t* | *p* | β | *t* | *p* |
| *NR3C1* | cg04111177 | –.06 | –0.77 | .446 | –.03 | –0.24 | .815 | –.09 | –0.80 | .425 |
| *NR3C1* | cg07733851 | –.01 | –0.13 | .900 | –.01 | –0.11 | .913 | .03 | 0.24 | .808 |
| *NR3C1* | cg27107893 | .00 | 0.02 | .981 | –.07 | –0.53 | .596 | .08 | 0.60 | .551 |
| *NR3C2* | cg10288772 | .09 | 1.13 | .262 | .30 | 2.64\* | .010 | –.07 | –0.65 | .519 |
| *SLC6A4* | cg18584905 | –.01 | –0.14 | .893 | –.01 | –0.07 | .944 | .02 | 0.19 | .852 |
| *SLC6A4* | cg26741280 | –.04 | –0.56 | .580 | –.11 | –0.99 | .327 | –.00 | –0.02 | .983 |
|  |  | Total cortisol releasea,c | | | | | | | | |
|  |  | All  (*n* = 145) | | | Boys  (*n* = 71) | | | Girls  (*n* = 74) | | |
| Gene | CpG | β | *t* | *p* | β | *t* | *p* | β | *t* | *p* |
| *NR3C1* | cg04111177 | .03 | 0.41 | .684 | .05 | 0.56 | .575 | –.00 | –0.00 | .995 |
| *NR3C1* | cg07733851 | –.12 | –1.83 | .069 | –.15 | –1.68 | .098 | –.07 | –0.81 | .419 |
| *NR3C1* | cg27107893 | –.02 | –0.28 | .778 | –.14 | –1.37 | .177 | .08 | 0.74 | .466 |
| *NR3C2* | cg10288772 | .03 | 0.48 | .630 | .03 | 0.30 | .768 | .03 | 0.29 | .773 |
| *SLC6A4* | cg18584905 | –.03 | –0.48 | .630 | –.06 | –0.59 | .556 | –.01 | –0.14 | .890 |
| *SLC6A4* | cg26741280 | .01 | 0.15 | .883 | .04 | 0.47 | .638 | –.01 | –0.09 | .926 |

<TFN> *Note:* Specific covariates for the cortisol parameters were included in the models: atime between first and last sample; bmean Apgar score; cschool day (yes/no). \**p* < .05.

<FC> **Figure S.1**.Child diurnal cortisol profiles, separately for children nonexposed versus exposed to prenatal depressive symptoms and sex (*n* = 98–146). Default sampling times: T1 = at awakening, T2 = 30 min after awakening, T3 = 12 a.m., T4 = 5 p.m., T5 at bedtime. Prenatal EPDS (Edinburgh Postnatal Depression Scale; Cox et al., 1987) score <10 interpreted as nonexposed, ≥10 as exposed.

<FC> **Figure S.2*.***Results of the principle component analyses within the control probe adjustment (Lehne et al., 2015), indicating technical biases due to plate and chip. *R*2 values represent plate and chip effects before and after correction for 23 control probe principal components. Only *R*2values ≥.10 are indicated.

<FC> **Figure S.3.**Associations of principle components and relevant psychosocial variables after adjustment for 23 control probe factors and sex and birth parameters within the control probe adjustment (Lehne et al., 2015). Correlations are Pearson product–moment–correlation coefficients. Only coefficients with a *p* value ≤.10 are displayed. PC1 and PC2 were included as predictors in a final regression model to account for further biological variance. SES, socioeconomic family status. SDQ, Strength and Difficulties Questionnaire (Goodman, 2001). Emotional, SDQ emotional problems subscale. Conduct, SDQ conduct problems subscale. EPDS, Edinburgh Postnatal Depression Scale (Cox et al., 1987). Pre, prenatal; post, postpartum. \**p* < .05, \*\**p* < .01.

## <H1> References

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