**Supplementary Material**

**Figure S.1. Correspondence of Pyrosequencing and Array Quantification of *NR3C1***

We observed adequate correspondence between values estimated through pyrosequencing and the 450k array, with minimal differences between measurements for each of the three overlapping sites. Given the low variability of the promoter region, and many sites quantified at 0% methylation, the correlations between methods were small. For CpG 3 (cg04111177), the correlation was between pyrosequencing and the array values was significant (*r* = 0.26, *p* < 0.05), but for CpG 6 (cg15910486) and CpG 7 (cg15645634) the correlations were nonsignificant (*r* = 0.19, *p* = 0.12; *r* = -0.09, *p* = 0.45).

**Table S.1. Results for Models Testing Interactions Between Genotype and Contact and Infant Distress on DNAm**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BDNF cg07238832** | Estimate | Std. Error | t value | Pr(>|t|) |
| Intercept | 0.21 | 0.70 | 0.30 | 0.76 |
| Contact | 0.41 | 0.76 | 0.54 | 0.59 |
| BDNF A carrier | 0.68 | 0.71 | 0.97 | 0.34 |
| Sex | 0.02 | 0.13 | 0.14 | 0.89 |
| Race | 0.02 | 0.14 | 0.18 | 0.86 |
| Age | 0.04 | 0.15 | 0.25 | 0.81 |
| Contact\*BDNF A carrier | -0.07 | 0.16 | -0.44 | 0.66 |
| Contact\*Sex | -0.12 | 0.17 | -0.72 | 0.47 |
| Contact\*Race | -0.06 | 0.16 | -0.36 | 0.72 |
| Contact\*Age | -0.05 | 0.16 | -0.30 | 0.77 |
| BDNF A carrier\*Sex | -0.06 | 0.18 | -0.33 | 0.75 |
| BDNF A carrier\*Race | 0.32 | 0.17 | 1.83 | 0.07 |
| BDNF A carrier\*Age | -0.23 | 0.15 | -1.53 | 0.13 |
|  |  |  |  |  |
| Intercept | 0.53 | 0.52 | 1.01 | 0.31 |
| Distress | 0.47 | 0.23 | 2.05 | 0.04 |
| BDNF A carrier | 0.53 | 0.71 | 0.75 | 0.46 |
| Sex | -0.03 | 0.10 | -0.26 | 0.80 |
| Race | 0.02 | 0.10 | 0.19 | 0.85 |
| Age | -0.02 | 0.10 | -0.15 | 0.88 |
| Distress\*BDNF A carrier | -0.03 | 0.05 | -0.52 | 0.60 |
| Distress\*Sex | -0.01 | 0.05 | -0.24 | 0.81 |
| Distress\*Race | 0.00 | 0.05 | 0.04 | 0.97 |
| Distress\*Age | -0.10 | 0.05 | -2.12 | 0.04 |
| BDNF A carrier\*Sex | -0.15 | 0.17 | -0.89 | 0.38 |
| BDNF A carrier\*Race | 0.32 | 0.18 | 1.83 | 0.07 |
| BDNF A carrier\*Age | -0.18 | 0.15 | -1.21 | 0.23 |
| **BDNF cg10635145** |  |  |  |  |
| Intercept | -0.34 | 0.42 | -0.80 | 0.43 |
| Contact | 0.09 | 0.46 | 0.20 | 0.85 |
| BDNF A carrier | 0.06 | 0.43 | 0.13 | 0.90 |
| Sex | -0.10 | 0.08 | -1.34 | 0.18 |
| Race | 0.06 | 0.08 | 0.78 | 0.44 |
| Age | 0.02 | 0.09 | 0.19 | 0.85 |
| Contact\*BDNF A carrier | -0.03 | 0.10 | -0.35 | 0.73 |
| Contact\*Sex | 0.10 | 0.10 | 1.01 | 0.32 |
| Contact\*Race | -0.01 | 0.10 | -0.13 | 0.90 |
| Contact\*Age | -0.03 | 0.09 | -0.31 | 0.75 |
| BDNF A carrier\*Sex | -0.37 | 0.11 | -3.53 | 0.00 |
| BDNF A carrier\*Race | 0.29 | 0.10 | 2.77 | 0.01 |
| BDNF A carrier\*Age | -0.07 | 0.09 | -0.79 | 0.43 |
|  |  |  |  |  |
| Intercept | -0.22 | 0.32 | -0.68 | 0.50 |
| Distress | 0.02 | 0.14 | 0.17 | 0.87 |
| BDNF A carrier | 0.07 | 0.43 | 0.16 | 0.88 |
| Sex | -0.06 | 0.06 | -0.92 | 0.36 |
| Race | 0.04 | 0.06 | 0.72 | 0.47 |
| Age | -0.01 | 0.06 | -0.17 | 0.86 |
| Distress\*BDNF A carrier | 0.02 | 0.03 | 0.51 | 0.61 |
| Distress\*Sex | -0.01 | 0.03 | -0.42 | 0.67 |
| Distress\*Race | 0.00 | 0.03 | 0.03 | 0.98 |
| Distress\*Age | 0.00 | 0.03 | -0.16 | 0.87 |
| BDNF A carrier\*Sex | -0.36 | 0.11 | -3.43 | 0.00 |
| BDNF A carrier\*Race | 0.32 | 0.11 | 2.94 | 0.00 |
| BDNF A carrier\*Age | -0.09 | 0.09 | -0.93 | 0.35 |
| **OXTR cg17036624** |  |  |  |  |
| Intercept | 0.95 | 0.47 | 2.00 | 0.05 |
| Contact | -0.15 | 0.52 | -0.30 | 0.77 |
| BDNF A carrier | -0.19 | 0.54 | -0.35 | 0.73 |
| Sex | 0.02 | 0.08 | 0.26 | 0.80 |
| Race | -0.05 | 0.09 | -0.60 | 0.55 |
| Age | 0.00 | 0.10 | 0.00 | 1.00 |
| Contact\*OXTR A carrier | -0.02 | 0.12 | -0.20 | 0.84 |
| Contact\*Sex | -0.10 | 0.11 | -0.88 | 0.38 |
| Contact\*Race | -0.04 | 0.11 | -0.34 | 0.73 |
| Contact\*Age | 0.04 | 0.11 | 0.38 | 0.70 |
| OXTR A carrier\*Sex | -0.21 | 0.12 | -1.67 | 0.10 |
| OXTR A carrier\*Race | 0.14 | 0.13 | 1.09 | 0.28 |
| OXTR A carrier\*Age | 0.01 | 0.11 | 0.11 | 0.91 |
|  |  |  |  |  |
| Intercept | 0.80 | 0.29 | 2.81 | 0.01 |
| Distress | -0.05 | 0.15 | -0.32 | 0.75 |
| BDNF A carrier | -0.28 | 0.57 | -0.50 | 0.62 |
| Sex | -0.04 | 0.06 | -0.69 | 0.49 |
| Race | -0.06 | 0.06 | -0.98 | 0.33 |
| Age | 0.03 | 0.06 | 0.57 | 0.57 |
| Distress\*OXTR A carrier | -0.02 | 0.04 | -0.59 | 0.56 |
| Distress\*Sex | 0.03 | 0.04 | 0.83 | 0.41 |
| Distress\*Race | -0.01 | 0.03 | -0.25 | 0.81 |
| Distress\*Age | 0.01 | 0.03 | 0.31 | 0.76 |
| OXTR A carrier\*Sex | -0.19 | 0.13 | -1.49 | 0.14 |
| OXTR A carrier\*Race | 0.10 | 0.14 | 0.72 | 0.47 |
| OXTR A carrier\*Age | 0.03 | 0.12 | 0.27 | 0.79 |

**Table S.2. Details on Individual CpGs Found within DMRs**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CpG | Estimate | False Discovery Rate | Gene | Pr(>|t|) | Chromosome | Position | Difference | Location Relative to TSS |
| cg05655707 | 0.0086 | 0.0000 | *LDHAL6A* | 2E-12 | chr11 | 18477254 | 0.0040 | ICshore |
| cg06588556 | 0.0543 | 0.0000 | *LDHAL6A* | 1E-12 | chr11 | 18477299 | 0.0364 | HC |
| cg06888460 | 0.0525 | 0.0000 | *LDHAL6A* | 1E-12 | chr11 | 18477303 | 0.0376 | HC |
| cg07915343 | 0.0361 | 0.0000 | *LDHAL6A* | 8E-13 | chr11 | 18477680 | 0.0210 | HC |
| cg15463284 | 0.0455 | 0.0000 | *LDHAL6A* | 4E-13 | chr11 | 18477534 | 0.0311 | HC |
| cg18888461 | 0.0444 | 0.0000 | *LDHAL6A* | 7E-13 | chr11 | 18477379 | 0.0283 | HC |
| cg23797887 | 0.0324 | 0.0000 | *LDHAL6A* | 2E-12 | chr11 | 18477753 | 0.0179 | HC |
| cg24440827 | -0.0011 | 0.0000 | *LDHAL6A* | 1E-08 | chr11 | 18478135 | -0.0016 | ICshore |
| cg26740318 | 0.0301 | 0.0000 | *LDHAL6A* | 4E-12 | chr11 | 18477153 | 0.0199 | ICshore |
| cg06080014 | -0.0607 | 0.0901 |  | 2E-04 | chr16 | 84822990 | -0.0458 | IC |
| cg06927361 | -0.0423 | 0.0913 |  | 2E-04 | chr16 | 84823224 | -0.0338 | IC |
| cg00588198 | 0.0530 | 0.0001 |  | 1E-08 | chr6 | 29648452 | 0.0567 | ICshore |
| cg02157626 | 0.0636 | 0.0000 |  | 7E-09 | chr6 | 29648736 | 0.0647 | HC |
| cg03198009 | 0.0648 | 0.0000 |  | 8E-09 | chr6 | 29648604 | 0.0685 | ICshore |
| cg03449857 | 0.0720 | 0.0000 |  | 7E-09 | chr6 | 29648623 | 0.0744 | ICshore |
| cg04071440 | 0.0200 | 0.0001 |  | 4E-08 | chr6 | 29648275 | 0.0210 | ICshore |
| cg07134666 | 0.0456 | 0.0001 |  | 2E-08 | chr6 | 29648400 | 0.0479 | ICshore |
| cg08022281 | 0.0371 | 0.0001 |  | 2E-08 | chr6 | 29648345 | 0.0366 | ICshore |
| cg08041448 | 0.0859 | 0.0000 |  | 1E-08 | chr6 | 29648901 | 0.0898 | HC |
| cg10648573 | 0.0430 | 0.0001 |  | 2E-08 | chr6 | 29648348 | 0.0435 | ICshore |
| cg11383134 | 0.0789 | 0.0000 |  | 8E-09 | chr6 | 29648590 | 0.0802 | ICshore |
| cg11747594 | 0.0167 | 0.0002 |  | 5E-08 | chr6 | 29648225 | 0.0198 | ICshore |
| cg12644888 | 0.0377 | 0.0001 |  | 2E-08 | chr6 | 29648360 | 0.0401 | ICshore |
| cg13835168 | 0.0765 | 0.0000 |  | 7E-09 | chr6 | 29648756 | 0.0820 | HC |
| cg15570656 | 0.0841 | 0.0000 |  | 7E-09 | chr6 | 29648628 | 0.0862 | ICshore |
| cg15708526 | 0.0325 | 0.0001 |  | 4E-08 | chr6 | 29648271 | 0.0346 | ICshore |
| cg16885113 | 0.0386 | 0.0000 |  | 1E-08 | chr6 | 29648507 | 0.0395 | ICshore |
| cg19636627 | 0.0697 | 0.0002 |  | 6E-08 | chr6 | 29649084 | 0.0685 | HC |
| cg20228636 | 0.0895 | 0.0000 |  | 1E-08 | chr6 | 29648525 | 0.0898 | ICshore |
| cg22494932 | 0.0344 | 0.0001 |  | 2E-08 | chr6 | 29648379 | 0.0343 | ICshore |
| cg24100841 | 0.0617 | 0.0001 |  | 3E-08 | chr6 | 29649024 | 0.0664 | HC |
| cg25699073 | 0.0367 | 0.0001 |  | 2E-08 | chr6 | 29648381 | 0.0374 | ICshore |
| cg25978138 | 0.0271 | 0.0002 |  | 8E-08 | chr6 | 29648161 | 0.0285 | ICshore |
| cg01341801 | -0.1275 | 0.0131 | *HLA-DRB5* | 1E-05 | chr6 | 32489203 | -0.1352 | LC |
| cg05938207 | 0.0518 | 0.0623 | *HLA-DRB5* | 1E-04 | chr6 | 32489750 | 0.0455 | HC |
| cg08188015 | -0.0490 | 0.0248 | *HLA-DRB5* | 3E-05 | chr6 | 32489553 | -0.0563 | ICshore |
| cg13972202 | 0.0743 | 0.0786 | *HLA-DRB5* | 2E-04 | chr6 | 32489801 | 0.0737 | HC |
| cg18816397 | -0.0529 | 0.0250 | *HLA-DRB5* | 3E-05 | chr6 | 32489555 | -0.0546 | ICshore |
| cg05779406 | 0.0862 | 0.0059 | *ZFAND2A* | 5E-06 | chr7 | 1198841 | 0.0722 | HC |
| cg07092213 | 0.0160 | 0.0545 | *ZFAND2A* | 9E-05 | chr7 | 1199455 | 0.0121 | HC |
| cg12950816 | 0.0745 | 0.0051 | *ZFAND2A* | 4E-06 | chr7 | 1198977 | 0.0659 | HC |
| cg15112475 | 0.0273 | 0.0105 | *ZFAND2A* | 1E-05 | chr7 | 1198522 | 0.0257 | ICshore |
| cg16145915 | 0.0265 | 0.0079 | *ZFAND2A* | 6E-06 | chr7 | 1198662 | 0.0231 | HC |
| cg18765753 | 0.0310 | 0.0053 | *ZFAND2A* | 4E-06 | chr7 | 1198926 | 0.0239 | HC |

*Note.* Difference = difference between high and low contact groups.

**Supplementary Table 3. Results for Main Effects and Interaction Models Testing Associations Between Contact and Epigenetic Age Deviation.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Main Effects Model | Estimate | Std. Error | t value | Pr(>|t|) |
| Intercept | 0.59 | 0.44 | 1.36 | 0.18 |
| Contact | 0.17 | 0.15 | 1.10 | 0.27 |
| Distress | 0.01 | 0.05 | 0.28 | 0.78 |
| Sex | 0.04 | 0.15 | 0.26 | 0.79 |
| Race | -0.05 | 0.15 | -0.33 | 0.74 |
| Years Education | -0.04 | 0.03 | -1.50 | 0.14 |
| Interaction Model |   |   |   |
| Intercept | 1.35 | 0.70 | 1.92 | 0.06 |
| Contact | -1.15 | 0.94 | -1.22 | 0.23 |
| Distress | 0.33 | 0.26 | 1.27 | 0.21 |
| Sex | 0.31 | 0.23 | 1.35 | 0.18 |
| Race | 0.09 | 0.22 | 0.40 | 0.69 |
| Years Education | -0.10 | 0.04 | -2.35 | 0.02 |
| Contact\*Distress | 0.23 | 0.10 | 2.41 | 0.02 |
| Distress\*Sex | -0.07 | 0.10 | -0.66 | 0.51 |
| Contact\*Sex | -0.41 | 0.32 | -1.31 | 0.19 |
| Distress\*Race | 0.03 | 0.09 | 0.29 | 0.77 |
| Contact\*Race | -0.22 | 0.33 | -0.66 | 0.51 |
| Distress\*Years Education | -0.03 | 0.02 | -1.63 | 0.11 |
| Contact\*Years Education | 0.10 | 0.06 | 1.79 | 0.08 |