**Supplementary Table S3. Correlations between covariates and child neuropsychiatric outcomes**. All neuropsychiatric outcomes are expressed in z-scores. a ****** : Spearman correlation coefficients of continuous covariates with child psychiatric problems, b high deprivation levels: deprivation category 4- 7 and low : category 1-3 according to the Midlothian postcode census (Mcloone, 2004). Smoking status was assessed during pregnancy, GDM= gestational diabetes mellitus. Mean difference: mean group differences between the groups of the categorical covariates in child psychiatric problems in independent samples t-test analyses and the 95% CI. Bold text: statistically significant results.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Neuropsychiatric outcomes** | **Conner's ADHD scale** | | **√ [ESSENCE]** | | **SDQ total difficulties** | | **√ [CBCL internalising]** | | **√ [CBCL externalising]** | | **√ [CBCL total problems]** | | **CSHQ total sleep problem scores** | |
| MATERNAL COVARIATES | r /Mean Differencea | P | r /Mean Differencea | P | r /Mean Differencea | p | r /Mean Differencea | p | r /Mean Differencea | P | r /Mean Differencea | p | r /Mean Differencea | p |
| Parity: nulliparous VS ≥1 | 0.01 (-0.38, 0.40) | 0.961 | -0.00 (-0.39, 0.38) | 0.995 | -0.22 (-0.61, 0.16) | 0.253 | 0.25 (-0.14, 0.64) | 0.209 | -0.04 (0.43, 0.35) | 0.846 | 0.17 (-0.22, 0.56) | 0.399 | 0.00 (-0.38, 0.39) | 0.980 |
| Smoked VS never | -0.06 (-1.33, 1.20) | >0.999 | 0.04 (-0.98, 1.06) | 0.939 | 0.35 (-0.91, 1.62) | >0.999 | -0.59 (-2.03, 0.85) | 0.966 | -0.16 (-1.61, 1.29) | 0.966 | -0.52 (-1.97, 0.92) | >0.999 | 0.42 (-0.84, 1.68) | >0.999 |
| Smoked VS ex- smoker | 0.09 (-1.19, 1.36) | >0.999 | -0.27 (-1.30, 0.76) | 0.607 | 0.42 (-0.86, 1.70) | >0.999 | -0.42 (-1.88, 1.03) | >0.999 | -0.11 (-1.57, 1.36) | >0.999 | -0.36 (-1.82, 1.09) | >0.999 | 0.28 (-0.99, 1.56) | >0.999 |
| Ex- smoker VS never | -0.15 (-0.63, 0.33) | >0.999 | 0.31 (-0.08, 0.69) | 0.118 | -0.07 (-0.22, 0.41) | >0.999 | -0.17 (-0.65, 0.32) | >0.999 | -0.05 (-0.54, 0.43) | >0.999 | -0.16 (-0.64, 0.33) | >0.999 | 0.14 (-0.34, 0.61) | >0.999 |
| GDM : yes VS no | 0.30 (-0.87, 0.27) | 0.297 | 0.04 (-0.53, 0.60) | 0.889 | -0.39 (-0.95, 0.19) | 0.178 | -0.30 (-0.89, 0.29) | 0.313 | -0.25 (-0.84, 0.33) | 0.396 | -0.34 (-0.92, 0.25) | 0.262 | **-0.34 (-1.29, -0.17)** | **0.010** |
| Socioeconomic- deprivation: high VS lowb | -0.21 (-0.61, 0.19) | 0.297 | -0.20 (-0.59, 0.19) | 0.31 | -0.35 (-0.74, 0.05) | 0.082 | -0.29 (-0.70, 0.12) | 0.163 | **-0.41 (-0.81, -0.01**) | **0.046** | **-0.5 (-0.91, -0.10)** | **0.015** | **-0.56 (-0.95, -0.18)** | **0.004** |
| State anxiety symptoms | **0.21** | **0.028** | **0.33** | **0.001** | **0.27** | **0.005** | **0.31** | **0.001** | **0.24** | **0.014** | **0.33** | **0.001** | 0.11 | 0.237 |
| √ [GHQ depressive symptoms] | -0.04 | 0.700 | **0.22** | **0.021** | **0.19** | **0.046** | **0.07** | **0.450** | **0.05** | 0.590 | 0.14 | 0.148 | **0.24** | **0.013** |
| CHILD COVARIATES |  | | | | | | | | | | | | | |
| Sex: boy VS girl | **0.39 (0.02, 0.76)** | **0.040** | -0.04 (-0.41, 0.34) | 0.895 | **0.49 (0.12, 0.86)** | **0.010** | 0.03 (-0.36, 0.42) | 0.875 | **0.52 (0.15, 0.89)** | **0.007** | 0.27 (-0.11, 0.66) | 0.159 | -0.05 (-0.46, 0.30) | 0.678 |
| Gestational age | -0.13 | 0.188 | -0.17 | 0.079 | **-0.19** | **0.047** | -0.16 | 0.093 | -0.15 | 0.112 | -0.14 | 0.165 | **-0.26** | **0.005** |
| SDS birth weight | -0.13 | 0.171 | **-0.21** | **0.026** | -0.12 | 0.238 | -0.04 | 0.656 | -0.03 | 0.786 | -0.01 | 0.927 | -0.10 | 0.290 |
| Age at visit | 0.09 | 0.358 | 0.07 | 0.316 | 0.12 | 0.222 | 0.09 | 0.366 | 0.07 | 0.460 | 0.11 | 0.268 | 0.00 | 0.987 |