Supplementary Table S1. Associations between mothers’ preconception history of mental health problems and depression at 32 weeks pregnancy and 12 months postpartum.

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| --- | --- |
|  | **Mothers Perinatal Depression**  |
| **Preconception mental disorder** | **Fitted separately** | **Fitted jointly** |
| **β** |  **95% CI** | ***p*** |  | **β** | **95% CI** | ***p*** |
| **Continuity of mental health symptoms** |  |  |  |  |  |  |  |
|  None |   |   |   |   |   |   |   |
|  Adolescence only | 0.73 | (-0.04 – 1.51)  | 0.064 |   | 0.76 | (-0.04 – 1.55) | 0.061 |
|  Young adulthood only | 1.60 | (0.53 – 2.67)  | 0.004 |   | 1.61 | (0.52 – 2.70) | 0.004 |
|  Adolescence and young adult | 2.53 | (1.63 – 3.42) | 0.000 |   | 2.62 | (1.72 – 3.53) | 0.000 |
| **Sociodemographics and adolescent behaviour** |   |   |  |   |   |   |
|  Perinatal assessment point | -1.21 | (-1.61 - -0.81) | 0.000 |  | -1.21 | (-1.61 - -0.81) | 0.000 |
|  Childhood parental separation  | 0.44 | (-0.32 – 1.21)  | 0.255 |   | 0.44 | (-0.30 – 1.19) | 0.243 |
|  Childhood parental low education | -0.33 | (-1.08 – 0.42) | 0.383 |   | -0.51 | (-1.25 – 0.22) | 0.168 |
|  Parents born outside Australia | -0.17 | (-0.94 – 0.60) | 0.660 |  | -0.40 | (-1.14 – 0.33) | 0.281 |
|  Adolescent delinquency | 0.74 | (-0.03 – 1.50) | 0.060 |   | 0.95 | (0.10 – 1.80) | 0.028 |
|  Adolescent alcohol use | -0.24 | (-1.08 – 0.59) | 0.566 |   | -0.54 | (-1.45 – 0.37) | 0.246 |
|  Adolescent smoking | -0.43 | (-1.29 – 0.42) | 0.320 |   | -1.08 | (-2.00 - -0.17) | 0.021 |
|  Adolescent cannabis use | -0.04 | (-1.32 – 1.25)  | 0.955 |   | -0.17 | (-1.53 – 1.19) | 0.804 |
|  First child | -0.05 | (-0.54 – 0.45)  | 0.858 |   | -0.10 | (-0.59 – 0.39) | 0.683 |

Higher scores on the Edinburgh Postnatal Depression Scale indicate more severe depression

Supplementary Table S2. Association between fathers’ preconception history of mental health problems and depression at 12 months postpartum.

|  |  |
| --- | --- |
|  |  **Fathers Perinatal Depression** |
| **Preconception mental disorder** | **Fitted separately** |  | **Fitted jointly** |
| **β** |  **95% CI** | ***p*** |  | **β** | **95% CI** | ***p*** |
| **Continuity of mental health symptoms** |  |  |  |  |  |  |  |
|  None |   |   |   |   |   |   |   |
|  Adolescence only | 2.50 | (0.83 – 4.17) | 0.003 |   | 2.28 | (0.72 – 3.85) | 0.004 |
|  Young adulthood only | 2.03 | (0.63 – 3.43) | 0.005 |   | 1.86 | (0.51 – 3.22) | 0.007 |
|  Adolescence and young adult | 3.39 | (1.76 – 5.02) | 0.000 |   | 3.12 | (1.51 – 4.74) | 0.000 |
| **Sociodemographics and adolescent behaviour** |   |   |  |   |   |   |
|  Childhood parental separation  | -0.20 | (-1.49 – 1.08) | 0.756 |   | -0.70 | (-1.91 – 0.51) | 0.255 |
|  Childhood parental low education | -1.38 | (-2.59 - -0.17) | 0.025 |   | -1.75 | (-2.94 - -0.55) | 0.004 |
|  Parents not born in Australia | 0.58 | (-0.66 – 1.83) | 0.358 |  | 0.48 | (-0.69 – 1.65) | 0.421 |
|  Adolescent delinquency | 1.10 | (0.08 – 2.12) | 0.035 |   | 0.78 | (-0.25 – 1.82) | 0.139 |
|  Adolescent alcohol use | 0.87 | (-0.24 – 1.99) | 0.124 |   | 0.47 | (-0.58 – 1.53) | 0.377 |
|  Adolescent smoking | 1.96 | (0.16 – 3.77) | 0.033 |   | 1.01 | (-0.81 – 2.83) | 0.276 |
|  Adolescent cannabis use | 1.72 | (-0.36 – 3.79) | 0.105 |   | 0.17 | (-2.01 – 2.35) | 0.880 |
|  First child | -1.18 | (-2.16 - -0.20) | 0.018 |   | -1.17 | (-2.16 - -0.18) | 0.021 |

Higher scores on the Edinburgh Postnatal Depression Scale indicate more severe depression