Perinatal factors associate with vertebral size and shape but not lumbar lordosis in 10-year-old children

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Supplementary Information

Appendix A

Scatter plots for significant associations between mode scores and perinatal or maternal measurements

- 1. Mode 2 and birthweight
- 2. Mode 2 and placental weight
- 3. Mode 2 and Crown-heel length
- 4. Mode 2 and Maternal weight
- 5. Mode 2 and Maternal age
- 6. Mode 3 and child's height at age 10

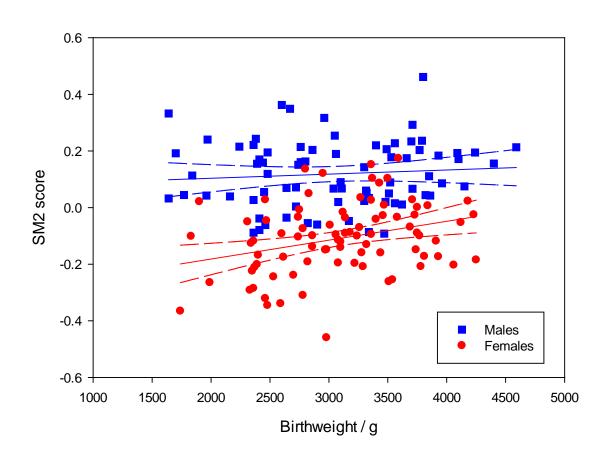
Appendix 2

Box plot of mode scores for modes 1-3 by sex

Regression line coefficients are given as value (standard deviation)

Appendix 1

Mode 2 versus birthweight



Females

r ² 0.096

Coefficients:

Intercept -0.316 (0.079)

Slope 6.67 x 10⁻⁵ (2.25 x 10⁻⁵)

Males

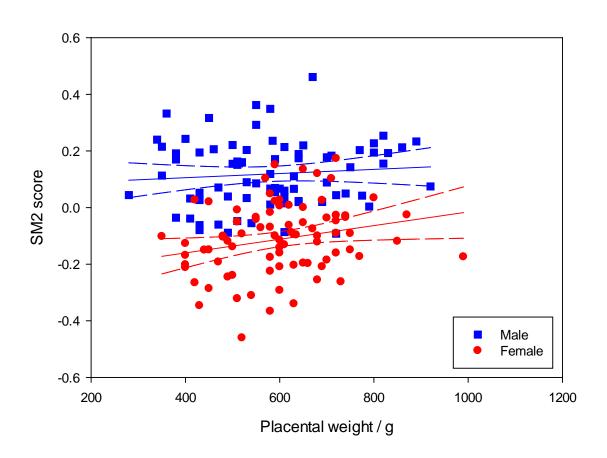
r² 0.0077

Coefficients:

Intercept 0.075 (0.060)

Slope 1.46 x 10⁻⁵ (1.91 x 10⁻⁵)

Mode 2 versus placental weight



Females

r ² 0.054

Coefficients:

Intercept -0.257 (0.069)

Slope 2.42 x 10⁻⁴ (1.13 x 10⁻⁴)

Males

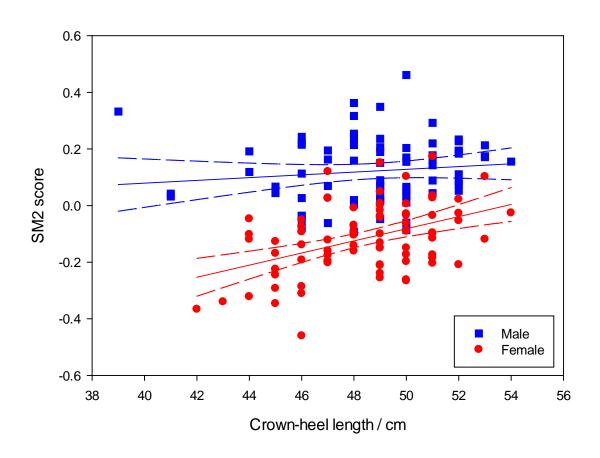
r² 0.0084

Coefficients:

Intercept 0.076 (0.055)

Slope 7.36 x 10⁻⁵ (9.25 x 10⁻⁵)

Mode 2 versus Crown-heel length



Female

r ² 0.196

Coefficients:

Intercept -1.15 (0.24)

Slope 0.0215 (0.0049)

Standard Errors:

Male

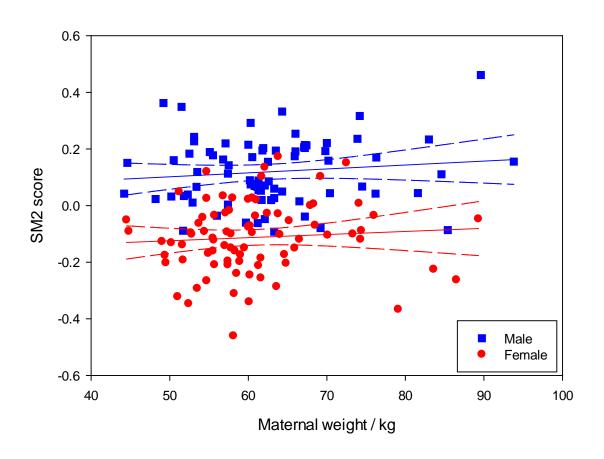
r ² 0.0149

Coefficients:

Intercept -0.12 (0.23)

Slope 0.0049 (0.0047)

Mode 2 versus Maternal weight



Female

r² 5.74 x 10⁻³

Coefficients:

Intercept -0.179 (0.098)

Slope 0.0011 (0.0016)

Male

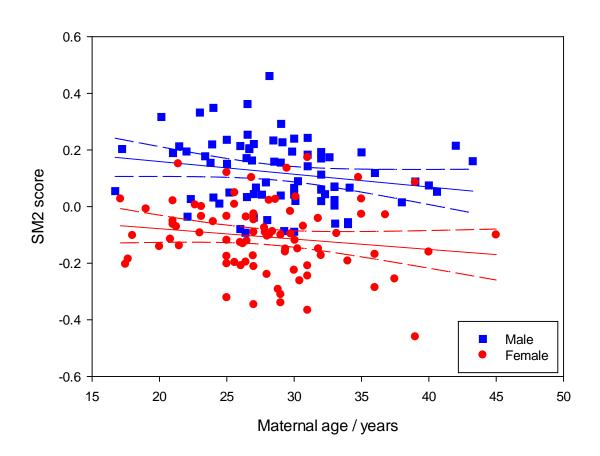
r² 0.0142844

Coefficients:

Intercept 0.032 (0.086)

Slope 0.0014 (0.0013)

Mode 2 versus Maternal age



Female

r ² 0.025

Coefficients:

Intercept -0.0053 (0.072)

Slope -0.0037 (0.0025)

Male

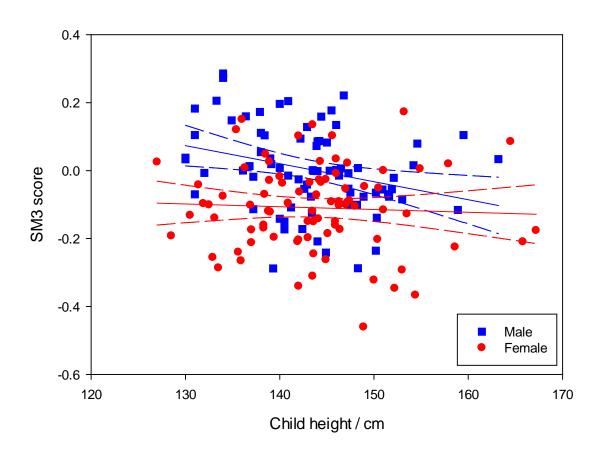
r² 0.0404223

Coefficients:

Intercept 0.249 (0.075)

Slope -0.0045 (0.0025)

Mode 3 versus Child height



Female

r² 2.57 x 10⁻³

Coefficients:

Intercept 0.0074 (0.25)

Slope $-8.1 \times 10^{-4} (17.6 \times 10^{-4})$

Male

r ² 0.086

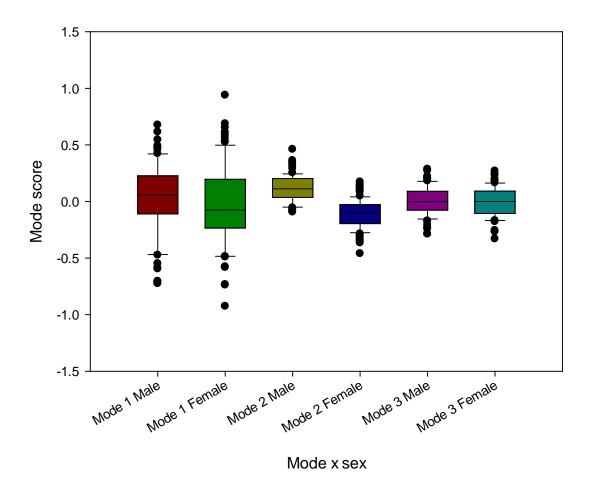
Coefficients:

Intercept 0.76 (0.29)

Slope -5.31 x 10⁻³ (1.99 x 10⁻³)

Appendix 2

Mode scores



Scores for modes 1 to 3 for each sex. Only mode 2, representing the aspect ratio (vertebral a-p diameter relative to vertebral height) was significantly different between the sexes. Boys had higher SM2 scores (0.119) than girls (-0.109) with the difference between the means being 0.228 [95%CI: 0.190, 0.226]