

Supplementary Table S1 Participant characteristics

| N (%) or median [interquartile range] | DQ < 85 n = 46 | DQ ≥ 85 n = 44 |
|---------------------------------------|----------------------|----------------------|
| Antenatal steroid use | 40 (87) | 35 (80) |
| HDP | 2 (4.3) | 2 (4.5) |
| PROM | 18 (39) | 21 (48) |
| Histological CAM | 30 (65) | 33 (75) |
| Primipara | 21 (46) | 23 (52) |
| Cesarean section | 19 (41) | 26 (59) |
| Multiple birth | 5 (11) | 6 (14) |
| Male sex | 26 (57) | 14 (32) |
| Gestational age, wk | 23.8 [23.4, 24.7] | 24.6 [24.0, 25.0] |
| Birth BW, g | 594.0 [524.5, 654.0] | 634.0 [549.5, 744.0] |
| Birth BW SD score | -0.28 [-0.97, 0.29] | -0.18 [-0.84, 0.38] |
| Birth BL, cm | 28.8 [27.5, 30.0] | 30.0 [28.2, 31.4] |
| Birth BL SD score | -0.42 [-1.21, -0.01] | -0.46 [-1.19, 0.28] |
| Birth HC, cm | 21.1 [20.4, 22.0] | 22.0 [21.0, 22.8] |
| Birth HC SD score | -0.09 [-0.60, 0.41] | 0.06 [-0.43, 0.43] |
| One-minute Apgar score | 3.0 [3.0, 4.0] | 3.00 [2.0, 4.3] |
| Five-minute Apgar score | 6.0 [5.0, 7.0] | 6.50 [5.0, 8.0] |
| CRIB score | 11.0 [9.0, 13.0] | 10.00 [8.0, 13.0] |
| Use of systemic steroids | 34 (74) | 32 (73) |
| CLD/BPD at 36 wk of CA | 40 (87) | 33 (75) |
| Timing of extubation, wk of CA | 31.8 [30.6, 34.9] | 31.4 [29.7, 32.8] |
| HOT | 20 (44) | 16 (36) |
| PDA operation | 15 (33) | 9 (21) |
| Time to first EN, d | 0.62 [0.42, 0.93] | 0.44 [0.31, 0.66] |
| Time to complete feeding, d | 13.0 [12.0, 16.0] | 12.0 [11.0, 13.0] |
| NEC | 3 (6.5) | 0 (0.0) |
| Severe IVH | 4 (8.7) | 3 (6.8) |
| Cystic PVL | 0 (0.0) | 0 (0.0) |
| ROP treatment | 18 (39) | 20 (47) |

Abbreviations: BL, body length; BW, body weight; CA, corrected age; CAM, chorioamnionitis; CLD/BPD, chronic lung disease/ bronchopulmonary dysplasia; CRIB, clinical risk index for babies; DQ, developmental quotient; EN, enteral nutrition; HC, head circumference; HDP, hypertensive disorders of pregnancy; HOT, home oxygen therapy; IVH, Intraventricular hemorrhage; NEC, necrotizing enterocolitis; PDA, patent ductus arteriosus; PROM, premature rupture of membrane; PVL, periventricular leukomalacia; ROP, retinopathy of prematurity.

Supplementary Table S2 The values related to body weight, body length, and head circumference, grouped according to the developmental quotient values

| Body weight | DQ < 85 N = 46 | DQ ≥ 85 N = 44 | p-Value |
|---------------|----------------------|----------------------|---------|
| SDS | -2.85 [-3.25, -2.38] | -2.66 [-3.14, -2.21] | 0.52 |
| dSDS | -2.49 [-3.31, -1.78] | -2.37 [-2.76, -2.08] | 0.78 |
| dSDS - M-dSDS | 0.80 [0.29, 1.31] | 0.34 [0.13, 0.55] | 0.001 |
| Body length | DQ < 85 N = 45 | DQ ≥ 85 N = 42 | p-Value |
| SDS | -2.59 [-3.51, -2.07] | -2.84 [-3.47, -1.85] | 0.91 |
| dSDS | -2.06 [-3.00, -1.18] | -2.30 [-3.13, -1.37] | 0.68 |

(Continued)

Supplementary Table S2 (Continued)

| Head circumference | DQ < 85 N = 45 | DQ ≥ 85 N = 42 | p-Value |
|--------------------|----------------------|----------------------|---------|
| SDS | -1.40 [-2.30, -0.98] | -1.50 [-2.14, -0.98] | 0.95 |
| dSDS | -1.52 [-1.91, -0.95] | -1.67 [-2.32, -1.03] | 0.38 |

Abbreviations: DQ, developmental quotient; dSDS, the difference between the SDS and SD score of body size at birth; M-dSDS, median dSDS of infants with a developmental quotient ≥85; M-SDS, median SDS of infants with a developmental quotient ≥85; SDS, SD score.
 Note: Represented by median [interquartile range]. Analyzed by Mann-Whitney U-test.

Supplementary Table S3 The values related to body weight, body length, and head circumference, grouped according to the developmental quotient values of the subscores (Cognitive-Adaptive)

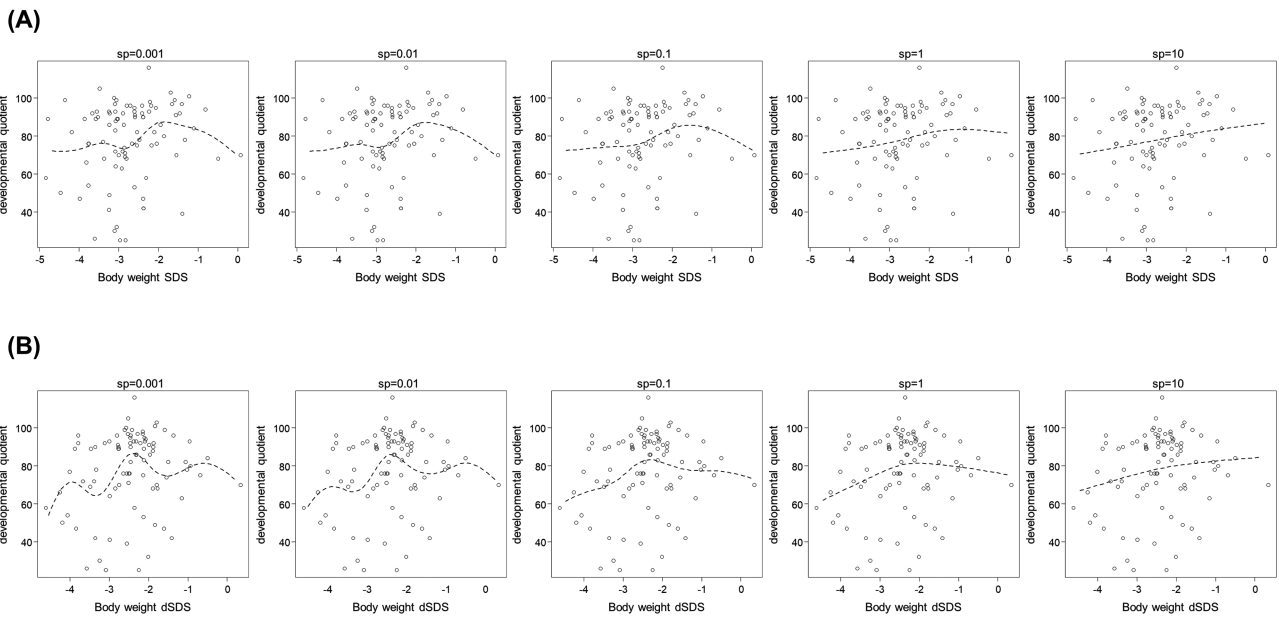
| Body weight | DQ < 85 N = 46 | DQ ≥ 85 N = 43 | p-Value |
|--------------------|----------------------|----------------------|---------|
| SDS | -2.87 [-3.25, -2.38] | -2.60 [-3.11, -2.20] | 0.48 |
| dSDS | -2.33 [-3.06, -1.78] | -2.45 [-2.77, -2.11] | 0.51 |
| dSDS - M-dSDS | 0.66 [0.29, 1.31] | 0.30 [0.14, 0.60] | 0.001 |
| Body length | DQ < 85 N = 45 | DQ ≥ 85 N = 41 | p-Value |
| SDS | -2.69 [-3.38, -2.16] | -2.71 [-3.61, -1.84] | 0.79 |
| dSDS | -2.06 [-3.00, -1.18] | -2.26 [-3.23, -1.40] | 0.52 |
| Head circumference | DQ < 85 N = 45 | DQ ≥ 85 N = 41 | p-Value |
| SDS | -1.53 [-2.24, -0.85] | -1.50 [-2.14, -1.11] | 0.72 |
| dSDS | -1.54 [-2.08, -0.84] | -1.66 [-2.18, -1.02] | 0.52 |

Abbreviations: DQ, developmental quotient; dSDS, the difference between the SDS and SD score of body size at birth; M-dSDS, median dSDS of infants with a developmental quotient ≥85; M-SDS, median SDS of infants with a developmental quotient ≥85; SDS, SD score.
 Note: Represented by median [interquartile range]. Analyzed by Mann-Whitney U-test.

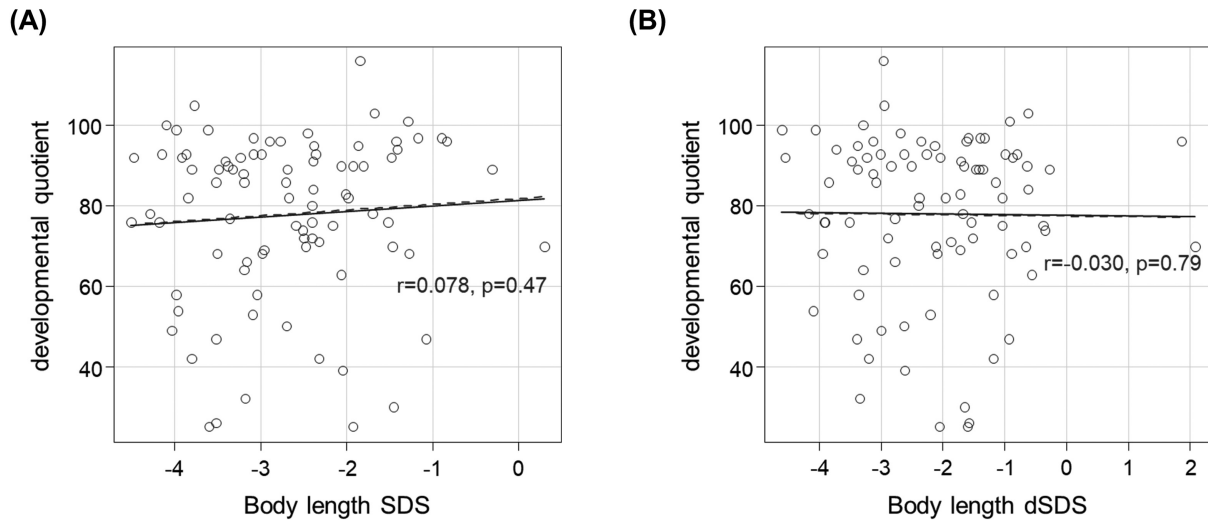
Supplementary Table S4 The values related to body weight, body length, and head circumference, grouped according to the developmental quotient values of the subscores (Language-Social)

| Body weight | DQ < 85 N = 52 | DQ ≥ 85 N = 37 | p-Value |
|--------------------|----------------------|----------------------|---------|
| SDS | -2.84 [-3.24, -2.39] | -2.71 [-3.12, -2.06] | 0.46 |
| dSDS | -2.49 [-3.12, -1.88] | -2.30 [-2.57, -1.96] | 0.28 |
| dSDS - M-dSDS | 0.60 [0.24, 1.14] | 0.38 [0.16, 0.63] | 0.066 |
| Body length | DQ < 85 N = 51 | DQ ≥ 85 N = 35 | p-Value |
| SDS | -2.59 [-3.42, -2.05] | -2.90 [-3.56, -1.76] | 0.91 |
| dSDS | -2.06 [-3.10, -1.34] | -2.35 [-3.12, -1.34] | 0.89 |
| Head circumference | DQ < 85 N = 51 | DQ ≥ 85 N = 35 | p-Value |
| SDS | -1.50 [-2.24, -0.98] | -1.51 [-2.19, -0.98] | 0.85 |
| dSDS | -1.57 [-1.98, -0.96] | -1.56 [-2.30, -0.97] | 0.73 |

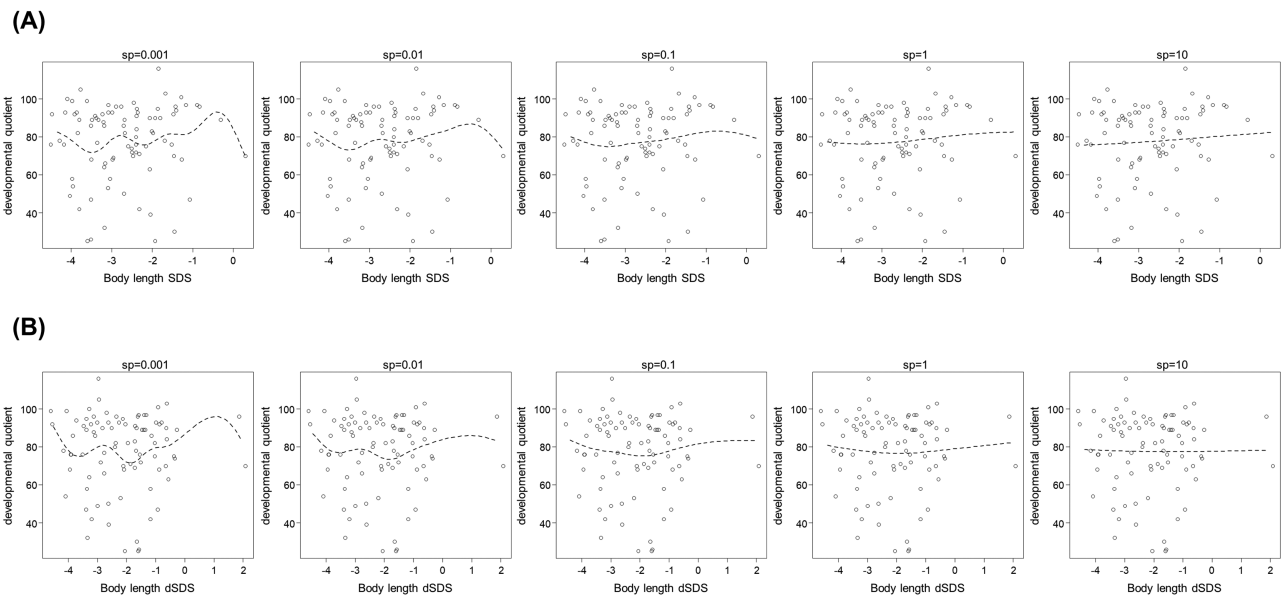
Abbreviations: DQ, developmental quotient; dSDS, the difference between the SDS and SD score of body size at birth; M-dSDS, median dSDS of infants with a developmental quotient ≥85; M-SDS, median SDS of infants with a developmental quotient ≥85; SDS, SD score.
 Note: Represented by median [interquartile range]. Analyzed by Mann-Whitney U-test.



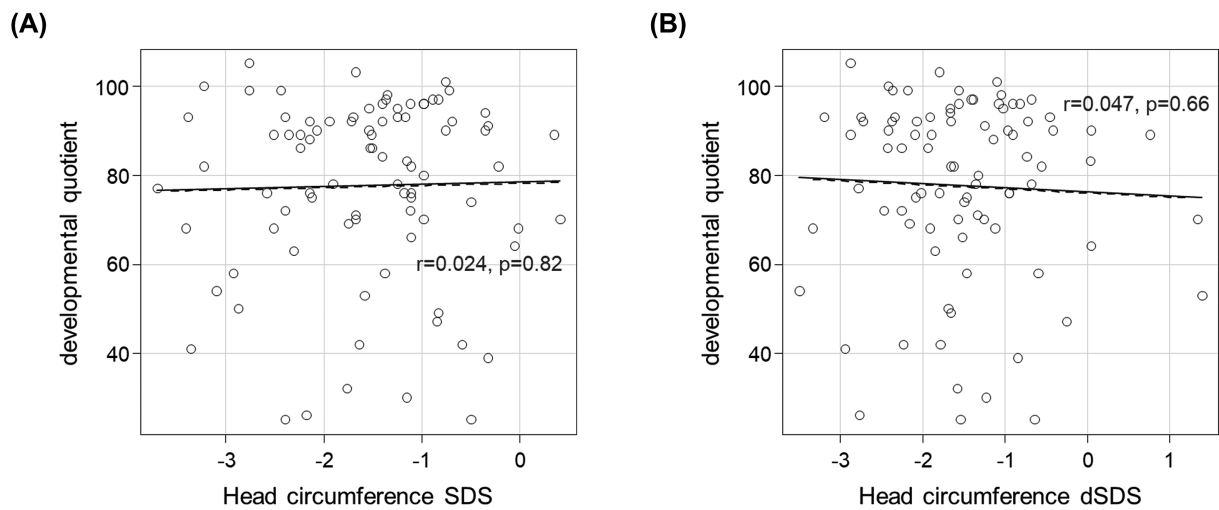
Supplementary Fig. S1 Scatter plots and smoothing spline curves for different smoothing parameters (0.001, 0.01, 0.1, 1, and 10) for developmental quotient and (A) body weight SDS, (B) body weight dSDS. Dashed line: smoothing spline curve. sp, smoothing parameter; SDS, standard deviation score; dSDS, the difference between the SDS and SD score of body weight at birth.



Supplementary Fig. S2 Scatter plots for developmental quotient and (A) body length SDS, (B) body length dSDS and respective Spearman's rank correlation coefficients. Straight line: least squares straight line, dashed line: smoothing spline curve. SDS, standard deviation score; dSDS, the difference between the SDS and SD score of body length at birth.

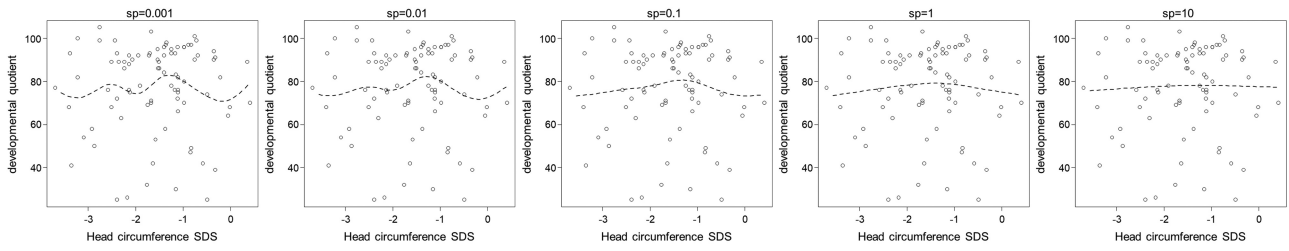


Supplementary Fig. S3 Scatter plots and smoothing spline curves for different smoothing parameters (0.001, 0.01, 0.1, 1, and 10) for developmental quotient and (A) body length SDS, (B) body length dSDS. Dashed line: smoothing spline curve. dSDS, the difference between the SDS and SD score of body length at birth ; SDS, standard deviation score; sp, smoothing parameter.

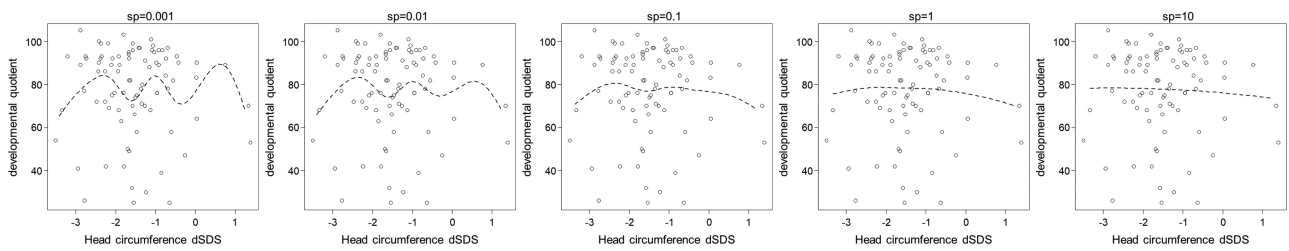


Supplementary Fig. S4 Scatter plots for developmental quotient and (A) head circumference SDS, (B) head circumference dSDS and respective Spearman’s rank correlation coefficients. Straight line: least squares straight line, dashed line: smoothing spline curve. SDS, standard deviation score; dSDS, the difference between the SDS and SD score of head circumference at birth.

(A)



(B)



Supplementary Fig. S5 Scatter plots and smoothing spline curves for different smoothing parameters (0.001, 0.01, 0.1, 1, and 10) for developmental quotient and (A) head circumference SDS, (B) head circumference dSDS. Dashed line: smoothing spline curve; SDS, standard deviation score; sp, smoothing parameter.