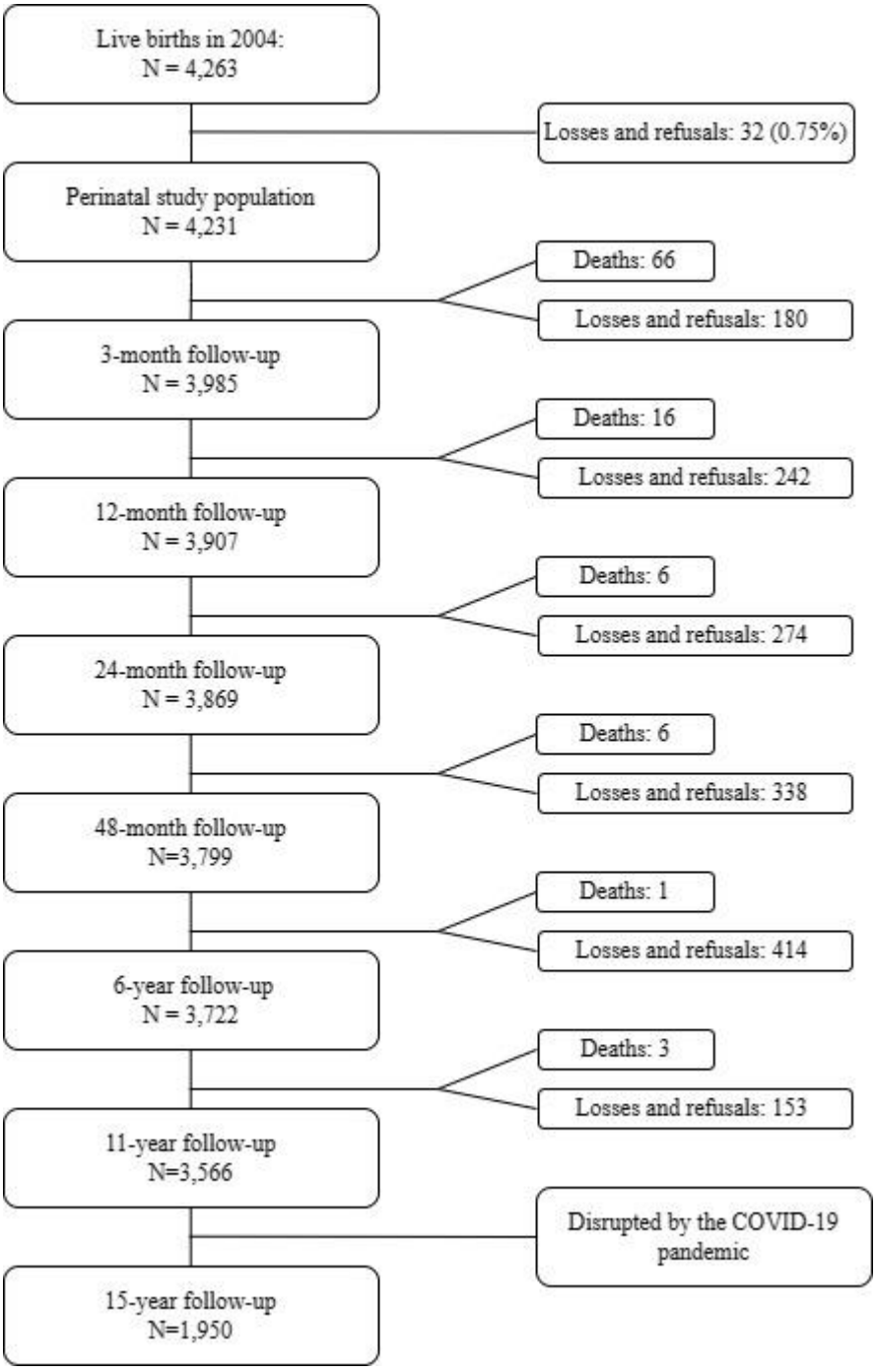
http://doi.org/10.47626/1516-4446-2023-3277
Risk factors for executive function impairment in adolescence: an analysis of data from the 2004 Pelotas Birth Cohort study – Rodrigues JS et al.

Figure S1 Flowchart illustrating the participation of subjects in the 2004 Pelotas Birth Cohort Study



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Table S1 Description of executive function tasks

Instrument	Executive function assessed	Task description and scoring
Test-of-Everyday-Attention-for-Children (TEA-Ch)	Attentional control	The child was shown a row of 24 elements, composed of the numbers "1" and "2". At first, the child was instructed to read the numbers as quickly as possible while the instructor kept his finger close to each number in the row until the child read it correctly. This task was named "*Same World"*. For the second condition, the child was instructed to read the row of numbers as quickly as possible, but this time saying "one" when the number seen was "2" and saying "two" when the number seen was "1". This task was called *"Opposite World".* The average time required to complete the "*Opposite World*" task was defined as the measure of attentional control outcome. Higher reaction times indicate more impaired ability (considering verbal processing speed).
(TEA-Ch)	Cognitive flexibility	The cognitive flexibility assessment instrument was the latency time on a double attention task of the *Sky Search* subtest. Initially, the child was instructed to select matching pairs of spacecraft from matching and non-matching types of craft contained in the test sheet. Then, the Sky Search task was repeated as a dual-task measure: the child was also asked to count the number of tones (beats) emitted by a recording while performing the task. The difference in speed and accuracy when completing the task with and without the addition of tones was taken as an indication of switching. A higher score indicates more impaired dual attention.
(TEA-Ch)	Selective attention	This ability was assessed by the latency time on the *Sky Search* task. Initially, the child was instructed to select pairs of spacecraft from matching and non-matching types of craft. On the test sheet, 50% of the spacecraft pairs were matched. The total time in seconds taken to perform the task (circle all pairs of spacecraft) and the number of hits (corresponding pairs of spacecraft) were recorded. At another time, the child was instructed to perform the same procedure on a work sheet that contained only matching pairs. The total time to perform this task and the number of correct answers were recorded. For each participant, motor-processing reaction time was subtracted from the ability score to provide the final measure of selective attention. The higher the score, the more impaired the child's selective attention.
Cambridge Neuropsychological Testing Automated Battery (CANTAB)	Spatial working memory	During the test, the child was presented with a series of colored squares displayed on a tablet screen. The goal was to locate a yellow "token" within each box by systematically selecting and eliminating boxes. With each round, an empty column on the right side of the screen would be filled, increasing the difficulty level. The number of boxes gradually increased, with a maximum of 12 boxes for participants to search through. To discourage the use of repetitive strategies, the color and position of the boxes were changed with each attempt. The total number of errors was used as an indicator of spatial working memory. Higher scores reflected greater impairment in spatial working memory.

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Table S2 Frequency of participants characteristics at the 11-year and 15-year follow-ups

	Follow-up	
	11 years (n=3582)	**15 years (n=1950)**
Variable	**n (%)**	**n (%)**
Family income, quintiles		
5th quintile (wealthiest)	693 (19.4)	362 (18.6)
4th quintile	754 (21.1)	432 (22.2)
3rd quintile	709 (19.9)	407 (20.9)
2nd quintile	716 (20.1)	383 (19.7)
1st quintile (poorest)	696 (19.5)	365 (18.7)
Maternal education, years		
≥ 9	1542 (43.7)	868 (44.9)
5-8	1465 (41.5)	790 (40.8)
1-4	497 (14.1)	264 (13.6)
0	29 (0.8)	13 (0.7)
Maternal age at birth, years		
20-34	2404 (67.4)	1296 (66.5)
< 20	669 (18.8)	350 (18.0)
≥ 35	493 (13.8)	303 (15.6)
Self-reported maternal skin color		
White	2197 (62.3)	1220 (63.4)
Black	584 (16.6)	316 (16.4)
Brown	711 (20.2)	375 (19.5)
Yellow/Indigenous	35 (1.00)	14 (0.7)
Parity		
1	1407 (39.44)	744 (38.17)
2	958 (26.86)	546 (28.01)
≥ 3	1202 (33.70)	659 (33.81)
Smoking during pregnancy		
No	2616 (73.32)	1440 (73.88)
Yes	952 (26.68)	509 (26.12)
Mother living with partner		
Yes	3013 (84.5)	1652 (84.8)
No	555 (15.6)	297 (15.3)
Child sex		
Male	1840 (51.6)	996 (51.1)
Female	1728 (48.4)	953 (48.9)
Preterm birth		
No	3068 (86.1)	1689 (86.8)
Yes	495 (13.9)	257 (13.2)
Low birth weight		
No	3247 (91.0)	175 (91.1)
Yes	320 (9.0)	173 (8.9)

Breastfeeding duration (months)		
0	97 (2.73)	63 (3.25)
< 1	273 (7.69)	133 (6.85)
1-3	539 (15.17)	287 (14.79)
3-12	1296 (36.49)	710 (36.58)
≥ 12	1347 (37.92)	748 (38.54)
Number of siblings		
0	1150 (33.61)	603 (32.52)
1	1285 (37.55)	726 (39.16)
≥ 2	987 (28.84)	525 (28.32)
Absence of father		
Never absent	2099 (66.76)	1220 (70.68)
Absent at 24 months	225 (7.16)	102 (5.91)
Absent at 48 months	370 (11.77)	179 (10.37)
Always absent	450 (14.31)	225 (13.04)
Trajectories of maternal depressive symptoms (3 months to 11 years)		
Low	1136 (32.58)	593 (31.23)
Moderate-low	1475 (42.30)	831 (43.76)
Decreasing	387 (11.10)	206 (10.85)
Increasing	319 (9.15)	171 (9.00)
Chronic-high	170 (4.88)	98 (5.16)
Maltreatment (CTSPC score)		
3rd tertile (highest)	1221 (34.70)	616 (33.30)
2nd tertile	1350 (38.36)	698 (37.73)
1st tertile (lower)	948 (26.94)	573 (28.97)
Attention control impairment		
No	3108 (90.03)	1666 (91.19)
Yes	344 (9.97)	161 (8.81)
Cognitive flexibility impairment		
No	3072 (90.01)	1625 (89.98)
Yes	341 (9.99)	181 (10.02)
Selective attention impairment		
No	3053 (90.01)	1641 (91.42)
Yes	339 (9.99)	154 (8.58)
Spatial working memory impairment		
No	1344 (73.36)	1403 (73.46)
Yes	488 (26.64)	50 (26.54)

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Table S3 Logistic regression models for impairment in attentional control, cognitive flexibility, and selective attention at age 11 and spatial working memory at age 15 in adolescents in the first income quintile.

Variables	Attentional control		Cognitive flexibility		Selective attention		Spatial working memory	
	Crude OR (95%CI)	Adjusted† OR (95%CI)	Crude OR (95%CI)	Adjusted† OR (95%CI)	Crude OR (95%CI)	Adjusted* OR (95%CI)	Crude OR (95%CI)	Adjusted† OR (95%CI)
Maternal education (years)	p = 0.003	p = 0.005	p = 0.014	p = 0.008	p = 0.008	p = 0.002	p = 0.004	p = 0.004
≥ 9	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)
5-8	1.95 (0.78-4.86)	1.66 (0.65-4.26)	2.44 (1.28-4.62)	2.72 (1.38-5.38)	1.65 (0.68-4.01)	2.01 (0.78-5.18)	2.77 (1.46-5.24)	3.00 (1.53-5.86)
1-4	10.31 (2.54-41.75)	10.79 (2.57-45.33)	3.08 (0.64-14.66)	3.56 (0.71-17.76)	8.54 (2.14-34.12)	14.56 (3.25-65.21)	3.89 (0.63-23.98)	3.27 (0.49-21.83)
0	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty
Maternal age at birth (years)	p = 0.525	p = 0.476	p = 0.056	p = 0.851	p = 0.102	p = 0.076	p = 0.739	p = 0.803
20-34	1 (ref)	-	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-
< 20	1.19 (0.34-4.13)	-	2.54 (1.15-5.64)	-	0.29 (0.04-2.17)	0.15 (0.02-1.26)	1.43 (0.54-3.75)	-
≥ 35	0.51 (0.15-1.76)	-	0.92 (0.41-2.04)	-	0.26 (0.06-1.11)	0.31 (0.07-1.38)	1.15 (0.60-2.20)	-
Self-reported maternal skin color	p = 0.073	p = 0.097	p = 0.030	p = 0.091	p = 0.018	p = 0.040	p = 0.808	p = 0.687
White	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	-
Black	1.83 (0.52-6.44)	1.93 (0.54-6.98)	2.86 (1.24-6.58)	2.51 (1.07-5.90)	3.92 (1.48-10.36)	3.74 (1.35-10.37)	1.20 (0.46-3.10)	-
Brown	1.61 (0.53-4.91)	1.30 (0.40-4.21)	1.79 (0.79-4.04)	1.47 (0.64-3.41)	1.91 (0.69-5.29)	1.34 (0.42-4.28)	0.67 (0.25-1.79)	-
Yellow/Indigenous	8.19 (1.59-42.23)	7.95 (1.48-42.64)	Empty	Empty	Empty	Empty	1.47 (0.15-14.37)	-
Parity	p = 0.291	p = 0.469	p = 0.349	p = 0.400	p = 0.726	p = 0.807	p = 0.502	p = 0.297
1	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
2	0.60 (0.21-1.70)	-	0.65 (0.65-1.17)	-	1.31 (0.56-3.10)	-	0.69 (0.36-1.31)	-
≥ 3	1.45 (0.61-3.48)	-	0.64 (0.30-1.40)	-	1.40 (0.56-3.50)	-	0.96 (0.49-1.88)	-

Smoking during pregnancy	p = 0.638	p = 0.222	p = 0.408	p = 0.117	p = 0.681	p = 0.308	p = 0.197	p = 0.486
No	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-
Yes	0.75 (0.22-2.53)	-	0.67 (0.26-1.73)	0.45 (0.16-1.22)	1.22 (0.46-3.30)	-	1.60 (0.78-3.29)	-
Mother living with partner	p = 0.492	p = 0.774	p = 0.193	p = 0.805	p = 0.910	p = 0.977	p = 0.974	p = 0.495
Yes	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
No	1.47 (0.49-4.36)	-	1.70 (0.76-3.79)	-	0.93 (0.28-3.15)	-	0.88 (0.35-2.22)	-
Child sex	p = 0.903	p = 0.981	p = 0.745	p = 0.602	p = 0.121	p = 0.103	p = 0.004	p = 0.011
Female	1 (ref)	-	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	1 (ref)
Male	0.95 (0.44-2.06)	-	1.10 (0.61-1.98)	-	1.85 (0.85-4.01)	1.97 (0.87-4.44)	0.45 (0.26-0.78)	0.47 (0.27-0.84)
Preterm birth	p = 0.258	p = 0.419	p = 0.286	p = 0.285	p = 0.625	p = 0.463	p = 0.329	p = 0.583
No	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
Yes	0.31 (0.04-2.34)	-	0.52 (0.16-1.72)	-	1.31 (0.44-3.87)	-	1.47 (0.68-3.16)	-
Low birth weight	p = 0.470	Empty	p = 0.365	p = 0.724	p = 0.408	p = 0.304	p = 0.796	p = 0.911
No	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
Yes	0.48 (0.06-3.58)	-	0.51 (0.12-2.18)	-	0.43 (0.06-3.20)	-	1.13 (0.44-2.89)	-
Breastfeeding duration (months)	p = 0.197	p = 0.546	p = 0.860	p = 0.673	p = 0.840	p = 0.834	p = 0.791	p = 0.619
0	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
< 1	2.30 (0.74-7.16)	-	0.38 (0.06-2.48)	-	0.82 (0.08-8.54)	-	1.18 (0.18-7.43)	-
1-3	1.32 (0.43-4.06)	-	0.63 (0.12-3.28)	-	0.99 (0.11-8.84)	-	0.90 (0.16-4.98)	-
3-12	0.66 (0.25-1.75)	-	0.50 (0.11-2.37)	-	0.57 (0.07-4.75)	-	0.73 (0.15-3.66)	-
≥ 12	Empty	-	0.52 (0.11-2.51)	-	0.61 (0.07-5.20)	-	1.06 (0.21-5.30)	-

Number of siblings	p = 0.093	p = 0.326	p = 0.619	p = 0.624	p = 0.409	p = 0.315	p = 0.184	p = 0.335
0	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
1	0.63 (0.25-1.59)	-	1.28 (0.66-2.48)	-	1.79 (0.75-4.26)	-	1.31 (0.70-2.42)	-
≥ 2	1.91 (0.75-4.92)	-	1.49 (0.63-3.49)	-	1.65 (0.53-5.17)	-	2.08 (0.95-4.54)	-
Absence of father	p = 0.932	p = 0.732	p = 0.413	p = 0.145	p = 0.853	p = 0.783	p = 0.754	p = 0.644
Never absent	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-
Absent at 24 months	0.89 (0.11-6.93)	-	0.72 (0.17-3.11)	0.56 (0.12-2.61)	1.54 (0.34-6.90)	-	0.93 (0.19-4.42)	-
Absent at 48 months	1.31 (0.29-5.85)	-	0.51 (0.12-2.17)	0.17 (0.02-1.34)	1.12 (0.25-4.94)	-	0.44 (0.10-1.95)	-
Always absent	Empty	-	0.24 (0.03-1.76)	0.20 (0.03-1.55)	0.52 (0.07-3.96)	-	1.04 (0.33-3.25)	-
Trajectories of maternal depressive symptoms (3 months to 11 years)	p = 0.004	p = 0.014	p = 0.721	p = 0.937	p = 0.891	p = 0.651	p = 0.122	p = 0.699
Low	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-	1 (ref)	-
Moderate-low	3.71 (1.20-11.54)	3.38 (1.06-10.76)	1.38 (0.72-2.63)	-	1.33 (0.57-3.14)	-	1.42 (0.76-2.65)	-
Decreasing	5.27 (1.14-24.39)	3.71 (0.75-18.47)	1.99 (0.70-5.67)	-	1.40 (0.29-6.60)	-	3.48 (1.31-9.21)	-
Increasing	12.86 (3.26-50.64)	11.19 (2.62-47.90)	1.51 (0.42-5.43)	-	1.86 (0.38-8.89)	-	1.43 (0.44-4.64)	-
Chronic-high	Empty	Empty	1.16 (0.14-9.39)	-	1.15 (0.26-18.05)	-	2.61 (1.63-10.82)	-
Maltreatment (CTSPC score)	p = 0.294	p = 0.658	p = 0.349	p = 0.113	p = 0.559	p = 0.725	p = 0.063	p = 0.301
3rd tertile (highest)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-
2nd tertile	2.08 (0.82-5.24)	-	0.65 (0.32-1.31)	0.67 (0.31-1.45)	1.13 (0.47-2.71)	-	1.19 (0.62-2.29)	-
1st tertile (lower)	1.76 (0.58-5.35)	-	0.64 (0.30-1.40)	1.61 (0.73-3.53)	1.67 (0.64-4.33)	-	2.25 (1.11-4.58)	-

† For attentional control: smoking during pregnancy (p = 0.222), mother living with partner (p = 0.774), child sex (p = 0.981), parity (p = 0.469), maternal age at birth (p = 0.476), preterm birth (p = 0.419), breastfeeding duration (p = 0.546), number of siblings (p = 0.326), absence of father (p = 0.732), and maltreatment (p = 0.658) were excluded from the final model. For cognitive flexibility: mother living with partner (p = 0.389), child sex (0.602), maternal age at birth (p = 0.851), parity (p = 0.400), mother living with partner (p = 0.805), preterm birth (p = 0.285), low birth weight (p = 0.724), breastfeeding duration (p = 0.673), number of siblings (p = 0.624), and trajectories of maternal depression symptoms (p = 0.937) were

excluded from the final model. For selective attention: mother living with partner (p = 0.977), parity (p = 0.807), smoking during pregnancy (p = 0.308), preterm birth (p = 0.463), low birth weight (p = 0.304), breastfeeding duration (p = 0.834), number of siblings (p = 0.315), absence of father (p = 0.783), trajectories of maternal depression symptoms (p = 0.651), and maltreatment (p = 0.725) were excluded from the final model. For working memory: maternal age at birth (p = 0.803), mother living with partner (p = 0.495), smoking during pregnancy (p = 0.486), self-reported maternal skin color (p = 0.687), preterm birth (p = 0.583), low birth weight (p = 0.911), breastfeeding (p = 0.619), number of siblings (p = 0.335), absence of father (p = 0.644), trajectories of maternal depression symptoms (p = 0.699), and maltreatment (p = 0.301) were excluded from the final model.

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Table S4 Logistic regression models for impairment in attentional control, cognitive flexibility and selective attention at age 11 and spatial working memory at age 15 in adolescents in the second, third, fourth, and fifth income quintiles.

Variables	Attentional control		Cognitive flexibility		Selective attention		Spatial working memory	
	Crude OR (95%CI)	Adjusted† OR (95%CI)	Crude OR (95%CI)	Adjusted† OR (95%CI)	Crude OR (95%CI)	Adjusted† OR (95%CI)	Crude OR (95%CI)	Adjusted† OR (95%CI)
Maternal education (years)	p < 0.001	p < 0.001	p = 0.008	p = 0.001	p < 0.001	p < 0.001	p < 0.001	p < 0.001
≥ 9	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)
5-8	2.23 (1.62-3.07)	1.66 (1.18-2.33)	1.90 (1.27-2.84)	1.61 (1.21-2.16)	1.77 (1.15-2.73)	1.63 (1.18-2.25)	1.65 (1.28-2.14)	1.46 (1.16-1.91)
1-4	4.69 (3.31-6.65)	3.26 (2.23-4.77)	2.10 (1.28-3.45)	1.89 (1.33-2.70)	2.50 (1.50-4.18)	2.64 (1.81-3.85)	2.37 (1.72-3.28)	2.29 (1.63-3.21)
0	6.17 (2.49-15.29)	4.48 (1.66-12.06)	1.68 (0.20-13.79)	2.42 (0.81-7.28)	12.58 (3.23-49.07)	7.09 (2.84-17.67)	6.61 (1.90-22.95)	5.02 (1.43-17.65)
Maternal age at birth (years)	p = 0.111	p = 0.001	p = 0.199	p = 0.350	p = 0.883	p = 0.058	p = 0.180	p = 0.194
20-34	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	1 (ref)
< 20	1.30 (0.99-1.71)	1.73 (1.21-2.47)	1.44 (0.97-2.14)	-	0.95 (0.61-1.50)	1.06 (0.74-1.52)	1.18 (0.90-1.55)	1.09 (0.81-1.45)
≥ 35	0.89 (0.61-1.31)	0.67 (0.45-1.01)	1.08 (0.66-1.76)	-	0.88 (0.52-1.49)	0.60 (0.40-0.92)	0.82 (0.59-1.15)	0.76 (0.53-1.07)
Self-reported maternal skin color	p < 0.001	p < 0.001	p = 0.982	p = 0.629	p < 0.001	p < 0.001	p < 0.001	p = 0.009
White	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	1 (ref)
Black	2.58 (1.93-3.45)	2.23 (1.65-3.02)	1.05 (0.67-1.64)	-	2.46 (1.60-3.77)	2.33 (1.73-3.12)	1.87 (1.41-2.48)	1.65 (1.23-2.22)
Brown	2.02 (1.51-2.70)	1.74 (1.29-2.34)	1.09 (0.72-1.66)	-	1.50 (0.95-2.37)	1.41 (1.04-1.92)	1.35 (1.02-1.78)	1.23 (0.92-1.65)
Yellow/Indigenous	1.03 (0.24-4.41)	1.08 (0.25-4.69)	0.97 (0.12-7.76)	-	1.47 (0.18-11.83)	1.05 (0.24-4.56)	1.30 (0.33-5.07)	1.16 (0.29-4.60)
Parity	p < 0.001	p < 0.001	p = 0.327	p = 0.219	p = 0.039	p = 0.114	p = 0.032	p = 0.259
1	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-

2	0.99 (0.72-1.35)	1.24 (0.85-1.81)	0.87 (0.56-1.35)	-	1.07 (0.67-1.73)	1.02 (0.72-1.46)	0.96 (0.72-1.28)	-
≥ 3	2.05 (1.59-2.66)	2.08 (1.43-3.02)	1.20 (0.82-1.77)	-	1.64 (1.08-2.48)	1.38 (0.97-1.96)	1.32 (1.03-1.72)	-
Smoking during pregnancy	p = 0.026	p = 0.889	p = 0.337	p = 0.564	p = 0.337	p = 0.553	p = 0.001	p = 0.059
No	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	1 (ref)
Yes	1.32 (1.03-1.69)	-	1.19 (0.83-1.71)	-	1.19 (0.83-1.71)	-	1.47 (1.16-1.87)	1.27 (0.99-1.64)
Mother living with partner	p = 0.127	p = 0.193	p = 0.801	p = 0.616	p = 0.801	p = 0.832	p = 0.205	p = 0.912
Yes	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-	1 (ref)	-
No	1.26 (0.94-1.69)	1.24 (0.90-1.70)	1.06 (0.68-1.66)	-	1.06 (0.68-1.66)	-	1.21 (0.90-1.62)	-
Child sex	p = 0.142	p = 0.070	p = 0.756	p = 0.703	p = 0.016	p = 0.013	p < 0.001	p < 0.001
Female	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	1 (ref)
Male	1.19 (0.94-1.51)	1.26 (0.98-1.61)	1.04 (0.82-1.32)	-	1.34 (1.06-1.70)	1.37 (1.07-1.75)	0.56 (0.44-0.70)	0.55 (0.44-0.69)
Preterm birth	p < 0.001	p = 0.065	p = 0.256	p = 0.052	p = 0.119	p = 0.325	p = 0.562	p = 0.333
No	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-
Yes	1.76 (1.32-2.36)	1.40 (0.98-1.99)	1.30 (0.82-2.06)	1.37 (1.00-1.89)	1.45 (0.91-2.32)	-	1.10 (0.80-1.51)	-
Low birth weight	p = 0.003	p = 0.135	p = 0.496	p = 0.633	p < 0.001	p < 0.001	p = 0.030	p = 0.112
No	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	1 (ref)
Yes	1.70 (1.20-2.42)	1.38 (0.90-2.12)	1.21 (0.70-2.10)	-	2.67 (1.65-4.31)	2.17 (1.52-3.09)	1.50 (1.04-2.17)	1.37 (0.93-2.01)
Breastfeeding duration (months)	p = 0.024	p = 0.146	p < 0.001	p = 0.002	p = 0.308	p = 0.654	p = 0.030	p = 0.051
0	1 (ref)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	1 (ref)

< 1	0.71 (0.32-1.54)	0.86 (0.37-1.97)	0.27 (0.10-0.69)	0.34 (0.16-0.71)	0.35 (0.12-1.03)	-	1.16 (0.55-2.44)	1.39 (0.64-3.04)
1-3	1.11 (0.55-2.22)	1.31 (0.63-2.73)	0.50 (0.24-1.07)	0.57 (0.31-1.06)	0.55 (0.23-1.33)	-	1.39 (0.70-2.73)	1.44 (0.71-2.95)
3-12	0.65 (0.33-1.28)	0.83 (0.41-1.69)	0.28 (0.14-0.58)	0.39 (0.22-0.71)	0.50 (0.22-1.13)	-	0.93 (0.49-1.79)	1.03 (0.52-2.05)
≥ 12	0.72 (0.37-1.40)	0.91 (0.45-1.85)	0.27 (0.13-0.56)	0.37 (0.20-0.66)	0.45 (0.20-1.01)	-	0.83 (0.43-1.58)	0.89 (0.45-1.76)
Number of siblings	p < 0.001	p = 0.022	p = 0.100	p = 0.370	p = 0.141	p = 0.233	p < 0.001	p = 0.257
0	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-	1 (ref)	-
1	1.11 (0.79-1.55)	1.12 (0.77-1.63)	1.14 (0.74-1.75)	-	1.41 (0.89-2.23)	-	1.12 (0.84-1.49)	-
≥ 2	2.41 (1.78-3.26)	1.65 (1.11-2.46)	1.55 (1.01-2.38)	-	1.59 (1.00-2.54)	-	1.67 (1.25-2.21)	-
Absence of father	p = 0.092	p = 0.356	p = 0.324	p = 0.902	p = 0.042	p = 0.072	p = 0.588	p = 0.873
Never absent	1 (ref)	-	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-
Absent at 24 months	1.12 (0.69-1.81)	-	0.50 (0.20-1.26)	-	1.04 (0.46-2.34)	0.93 (0.55-1.57)	1.02 (0.63-1.66)	-
Absent at 48 months	1.46 (1.02-2.08)	-	1.04 (0.60-1.79)	-	1.96 (1.17-3.28)	1.61 (1.12-2.31)	1.20 (0.83-1.74)	-
Always absent	1.38 (0.99-1.93)	-	0.71 (0.40-1.25)	-	1.57 (0.95-2.62)	1.10 (0.76-1.60)	1.21 (0.87-1.69)	-
Trajectories of maternal depressive symptoms (3 months to 11 years)	p = 0.092	p = 0.423	p = 0.303	p = 0.928	p = 0.186	p = 0.983	p = 0.005	p = 0.203
Low	1 (ref)	-	1 (ref)	-	1 (ref)	-	1 (ref)	-
Moderate-low	1.08 (0.80-1.45)	-	0.93 (0.62-1.41)	-	1.25 (0.79-2.00)	-	1.59 (1.19-2.11)	-
Decreasing	1.41 (0.96-2.09)	-	1.11 (0.62-1.97)	-	1.94 (1.08-3.49)	-	1.66 (1.12-2.45)	-
Increasing	1.64 (1.10-2.45)	-	1.45 (0.81-2.60)	-	1.72 (0.90-3.28)	-	1.75 (1.16-2.65)	-

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Chronic-high	1.20 (0.69-2.10)	-	1.69 (0.84-3.38)	-	1.13 (0.45-2.82)	-	2.00 (1.21-3.31)	-
Maltreatment (CTSPC score)	p = 0.949	p = 0.954	p = 0.879	p = 0.152	p = 0.907	p = 0.680	p = 0.924	p = 0.695
3rd tertile (highest)	1 (ref)	-	1 (ref)	1 (ref)	1 (ref)	-	1 (ref)	-
2nd tertile	0.97 (0.73-1.28)	-	1.11 (0.74-1.67)	0.74 (0.53-1.03)	1.10 (0.71-1.70)	-	0.95 (0.72-1.25)	-
1st tertile (lower)	0.95 (0.71-1.29)	-	1.05 (0.69-1.62)	0.97 (0.69-1.36)	1.08 (0.69-1.70)	-	1.00 (0.75-1.32)	-

† For attentional control: smoking during pregnancy (p = 0.889), absence of father (p = 0.356), trajectories of maternal depression (p = 0.423), and maltreatment (p = 0.954) were excluded from the final model. For cognitive flexibility: mother living with partner (p = 0.616), smoking during pregnancy (p = 0.564), self-reported maternal skin color (p = 0.629), parity (p = 0.219), child sex (p = 0.703), maternal age at birth (p = 0.350), low birth weight (p = 0.633), number of siblings (p = 0.370), absence of father (p = 0.902), and trajectories of maternal depression symptoms (p = 0.928) were excluded from the final model. For selective attention: mother living with partner (p = 0.832), smoking during pregnancy (p = 0.553), preterm birth (p = 0.325), breastfeeding duration (p = 0.654), number of siblings (p = 0.233), trajectories of maternal depression symptoms (p = 0.983), and maltreatment (p = 0.680) were excluded from the final model. For working memory: parity (p = 0.259), mother living with partner (p = 0.912), preterm birth (p = 0.333), number of siblings (p = 0.257), absence of father (p = 0.873), trajectories of maternal depression symptoms (p = 0.203), and maltreatment (p = 0.695) were excluded from the final model.