

## Supplemental Information

**SUPPLEMENTAL TABLE 4** Maternal Self-Reported Smoking and Cotinine Levels

	Self-Reported Smoking	
	No, <i>n</i> (%)	Yes, <i>n</i> (%)
Serum cotinine (ng/mL)		
Reference (<20)	702 (92.6)	56 (5.4)
Moderate (20–49.9)	18 (22.5)	62 (77.5)
Heavy (≥50)	18 (8.4)	196 (91.6)
Serum cotinine by deciles, %		
0–9	65 (98.5)	1 (1.5)
10–19	71 (98.6)	1 (1.4)
20–29	62 (96.9)	2 (3.1)
30–39	87 (98.9)	1 (1.1)
40–49	92 (96.8)	3 (3.2)
50–59	93 (95.9)	4 (4.1)
60–69	78 (94.0)	5 (6.0)
70–79	107 (92.2)	9 (7.8)
80–89	60 (45.1)	73 (54.9)
90–100	23 (9.7)	215 (90.3)

**SUPPLEMENTAL TABLE 5** Covariates in Relation to ADHD

	Patients (N = 1079)	Controls (N = 1079)	P
No. previous births, n (%)			<.001
0	513 (47.5)	421 (39.0)	—
≥1	566 (52.5)	658 (61.0)	—
Maternal SES, n (%)			<.001
Upper white collar	73 (6.8)	144 (13.4)	—
Lower white collar	431 (40.0)	471 (43.6)	—
Blue collar	225 (20.8)	193 (17.9)	—
Others	214 (19.8)	169 (15.7)	—
Missing	136 (12.6)	102 (9.4)	—
History of maternal psychopathology, n (%) <sup>a</sup>			<.001
No	802 (74.3)	951 (88.1)	—
Yes	277 (25.7)	128 (11.9)	—
History of maternal substance abuse, n (%) <sup>b</sup>			<.001
No	1022 (94.7)	1064 (98.6)	—
Yes	57 (5.3)	15 (1.4)	—
History of maternal ADHD diagnosis, n (%) <sup>c</sup>			.03
No	1072 (99.3)	1078 (99.9)	—
Yes	7 (0.7)	1 (0.1)	—
History of paternal psychopathology, n (%) <sup>d,e</sup>			<.001
No	793 (75.4)	930 (86.8)	—
Yes	259 (24.6)	142 (13.2)	—
History of paternal ADHD diagnosis, n (%) <sup>c,e</sup>			.03
No	1043 (99.1)	1070 (99.8)	—
Yes	9 (0.9)	2 (0.2)	—
Gestational age, wk, n (%) <sup>f</sup>			<0.001
<37	102 (9.5)	42 (3.9)	—
≥37	972 (90.5)	1032 (96.1)	—
BWGA, n (%) <sup>g</sup>			<.001
SGA (<-2 SD)	58 (5.4)	24 (2.2)	—
AGA (-2 SD [+2 SD])	979 (91.2)	1010 (94.0)	—
LGA (>+ 2 SD)	36 (3.4)	40 (3.7)	—
Maternal age, mean (SD), y	27.9 (5.9)	29.6 (5.3)	<.001
Paternal age, mean (SD), y	30.8 (6.8)	31.9 (6.2)	<.001
Gestational wk of blood draw, mean (SD)	10.7 (3.7)	10.7 (3.1)	.68

—, not applicable.

<sup>a</sup> ICD-8 codes 291–308, ICD-9 codes 291–316, or ICD-10 codes F10–99, excluding intellectual disability (ICD-10 codes F70–F79), ADHD diagnosis (ICD-10 code F90.x or ICD-9 code 314.x), and substance abuse diagnosis (ICD-8 codes 291, 303, and 304; ICD-9 codes 291, 292, 303, 304, and 305; or ICD-10 codes F10–19).

<sup>b</sup> ICD-8 codes 291, 303, and 304; ICD-9 codes 291, 292, 303, 304, and 305; or ICD-10 codes F10–F19.

<sup>c</sup> ICD-10 code F90.x or ICD-9 code 314.x

<sup>d</sup> ICD-8 codes 291–308, ICD-9 codes 291–316, or ICD-10 codes F10–F99, excluding intellectual disability (ICD-10 codes F70–F79) and ADHD diagnosis (ICD-10 code F90.x or ICD-9 code 314.x).

<sup>e</sup> Paternal psychopathology and paternal ADHD diagnosis missing for 27 patients (2.5%) and 7 controls (0.6%).

<sup>f</sup> Gestational age missing for 5 patients (0.5%) and 5 controls (0.5%).

<sup>g</sup> BWGA missing for 6 patients (0.06%) and 5 controls (0.5%).

[AQ16] SUPPLEMENTAL TABLE 6 Covariates in Relation to Maternal Serum Cotinine

[AQ17]

	Maternal Serum Cotinine			P
	<20 ng/mL (N = 936)	20–49 ng/mL (N = 54)	>50 ng/mL (N = 89)	
No. previous births, n (%)				<.32
0	368 (39.3)	24 (44.4)	29 (32.6)	—
≥1	568 (60.7)	30 (55.6)	60 (67.4)	—
Maternal SES, n (%)				<.001
Upper white collar	136 (14.5)	3 (5.6)	5 (5.6)	—
Lower white collar	423 (45.2)	22 (40.7)	26 (29.2)	—
Blue collar	152 (16.2)	18 (33.3)	23 (25.8)	—
Others	137 (14.7)	7 (13.0)	25 (28.1)	—
Missing	88 (9.4)	4 (7.4)	10 (11.2)	—
History of maternal psychopathology, n (%) <sup>a</sup>				<.001
No	839 (89.6)	48 (88.9)	64 (71.9)	—
Yes	97 (10.4)	6 (11.1)	25 (28.1)	—
History of maternal substance abuse, n (%) <sup>b</sup>				<.001
No	932 (99.6)	53 (98.1)	79 (88.8)	—
Yes	4 (0.4)	1 (1.8)	10 (11.2)	—
History of maternal ADHD diagnosis, n (%) <sup>c</sup>				1.00
No	935 (99.9)	54 (100)	89 (100)	—
Yes	1 (0.1)	0 (0)	0 (0)	—
History of paternal psychopathology, n (%) <sup>d,e</sup>				.08
No	815 (87.6)	45 (83.3)	70 (79.6)	—
Yes	115 (12.4)	9 (16.7)	18 (20.4)	—
History of paternal ADHD diagnosis, n (%) <sup>c,e</sup>				1.00
No	928 (99.8)	54 (100)	88 (100)	—
Yes	2 (0.2)	0 (0)	0 (0)	—
Gestational age, wk, , n (%) <sup>f</sup>				.10
<37	35 (3.8)	5 (9.3)	2 (2.3)	—
≥37	897 (96.2)	49 (90.7)	86 (97.7)	—
Wt for gestational age, n (%) <sup>g</sup>				.07
SGA (<−2 SD)	16 (1.7)	4 (7.4)	4 (4.6)	—
AGA (−2 SD to +2 SD)	877 (94.1)	49 (90.7)	84 (95.5)	—
LGA (>+ 2 SD)	39 (4.2)	1 (1.9)	0 (0)	—
Maternal age, mean (SD), y	29.7 (5.3)	28.7 (5.8)	28.6 (5.4)	.09
Paternal age, mean (SD), y	31.9 (6.1)	31.7 (6.7)	31.4 (6.4)	.72
Gestational wk of blood draw, mean (SD)	10.7 (0.7)	10.3 (3.6)	10.4 (3.2)	.52

AGA, appropriate for gestational age; LGA, large for gestational age; SGA, small for gestational age; —, not applicable.

<sup>a</sup> ICD-8 codes 291–308, ICD-9 codes 291–316, or ICD-10 codes F10–F99, excluding intellectual disability (ICD-10 codes F70–F79), ADHD diagnosis (ICD-10 code F90.x or ICD-9 code 314.x), and substance abuse diagnosis (ICD-8 codes 291, 303, and 304; ICD-9 codes 291, 292, 303, 304, and 305; or ICD-10 codes F10–F19).<sup>b</sup> ICD-8 codes 291, 303, and 304; ICD-9 codes 291, 292, 303, 304, and 305; or ICD-10 codes F10–F19.<sup>c</sup> ICD-10 code F90.x or ICD-9 code 314.x.<sup>d</sup> ICD-8 codes 291–308, ICD-9 codes 291–316, or ICD-10 codes F10–F99, excluding intellectual disability (ICD-10 codes F70–F79) and ADHD diagnoses (ICD-10 code F90.x or ICD-9 code 314.x).<sup>e</sup> Paternal psychopathology and paternal ADHD diagnosis missing for 7 controls (0.6%).<sup>f</sup> Gestational age missing for 5 controls (0.5%).<sup>g</sup> BWGA missing for 5 controls (0.5%).

**SUPPLEMENTAL TABLE 7** Distribution of Covariates Among Included and Missing Patients With ADHD

	Included Patients ( <i>N</i> = 1079)	Missing Patients ( <i>N</i> = 241)	<i>P</i>
No. previous births, <i>n</i> (%)			.38
0	513 (47.5)	122 (50.6)	—
≥1	566 (52.5)	119 (49.4)	—
Maternal SES, <i>n</i> (%)			.65
Upper white collar	73 (6.8)	20 (8.3)	—
Lower white collar	431 (40.0)	91 (37.8)	—
Blue collar	225 (20.8)	46 (19.1)	—
Others	214 (19.8)	56 (23.2)	—
Missing	136 (12.6)	28 (11.6)	—
History of maternal psychopathology <sup>a</sup>			.18
No	802 (74.3)	169 (70.1)	—
Yes	277 (25.7)	72 (29.9)	—
History of maternal substance abuse, <i>n</i> (%) <sup>b</sup>			.56
No	1022 (94.7)	226 (93.8)	—
Yes	57 (5.3)	15 (6.2)	—
History of maternal ADHD diagnosis, <i>n</i> (%) <sup>c</sup>			.12
No	1072 (99.3)	237 (98.3)	—
Yes	7 (0.7)	4 (1.7)	—
History of paternal psychopathology, <i>n</i> (%) <sup>d,e</sup>			.1
No	793 (75.4)	182 (80.5)	—
Yes	259 (24.6)	44 (19.5)	—
History of paternal ADHD diagnosis, <i>n</i> (%) <sup>c,e</sup>			1.0
No	1043 (99.1)	224 (99.1)	—
Yes	9 (0.9)	2 (0.9)	—
Gestational age, wk, <i>n</i> (%) <sup>f</sup>			.75
<37	102 (9.5)	21 (8.8)	—
≥37	972 (90.5)	217 (91.2)	—
BWGA, <i>n</i> (%) <sup>g</sup>			.77
SGA (<−2 SD)	58 (5.4)	14 (5.9)	—
AGA (−2 SD[+2 SD])	979 (91.2)	214 (89.9)	—
LGA (>+ 2 SD)	36 (3.4)	10 (4.2)	—
Maternal age, mean (SD), y	27.9 (5.9)	28.0 (5.9)	.77
Paternal age, mean (SD), y	30.8 (6.8)	31.9 (7.0)	.02

AGA, appropriate for gestational age; LGA, large for gestational age; SGA, small for gestational age; —, not applicable.

<sup>a</sup> ICD-8 codes 291–308, ICD-9 codes 291–316 or ICD-10 codes F10–F99, excluding intellectual disability (ICD-10 codes F70–F79), ADHD diagnosis (ICD-10 code F90.x or ICD-9 code 314.x), and substance abuse diagnosis (ICD-8 codes 291, 303, and 304; ICD-9 code 291, 292, 303, 304, and 305; or ICD-10 codes F10–F19).

<sup>b</sup> ICD-8 codes 291, 303, and 304; ICD-9 codes 291, 292, 303, 304, and 305; or ICD-10 codes F10–F19.

<sup>c</sup> ICD-10 code F90 or ICD-9 code 314.x.

<sup>d</sup> ICD-8 codes 291–308, ICD-9 codes 291–316 or ICD-10 codes F10–F99, excluding intellectual disability (ICD-10 codes F70–F79) and ADHD diagnosis (ICD-10 code F90.x or ICD-9 code 314.x).

<sup>e</sup> Paternal psychopathology and paternal ADHD diagnosis missing for 27 included patients (2.5%) and 15 missing patients (6.0%).

<sup>f</sup> Gestational age missing for 5 included patients (0.5%) and 3 missing patients (1.2%).

<sup>g</sup> BWGA missing for 6 included patients (0.06%) and 3 missing patients (1.2%).