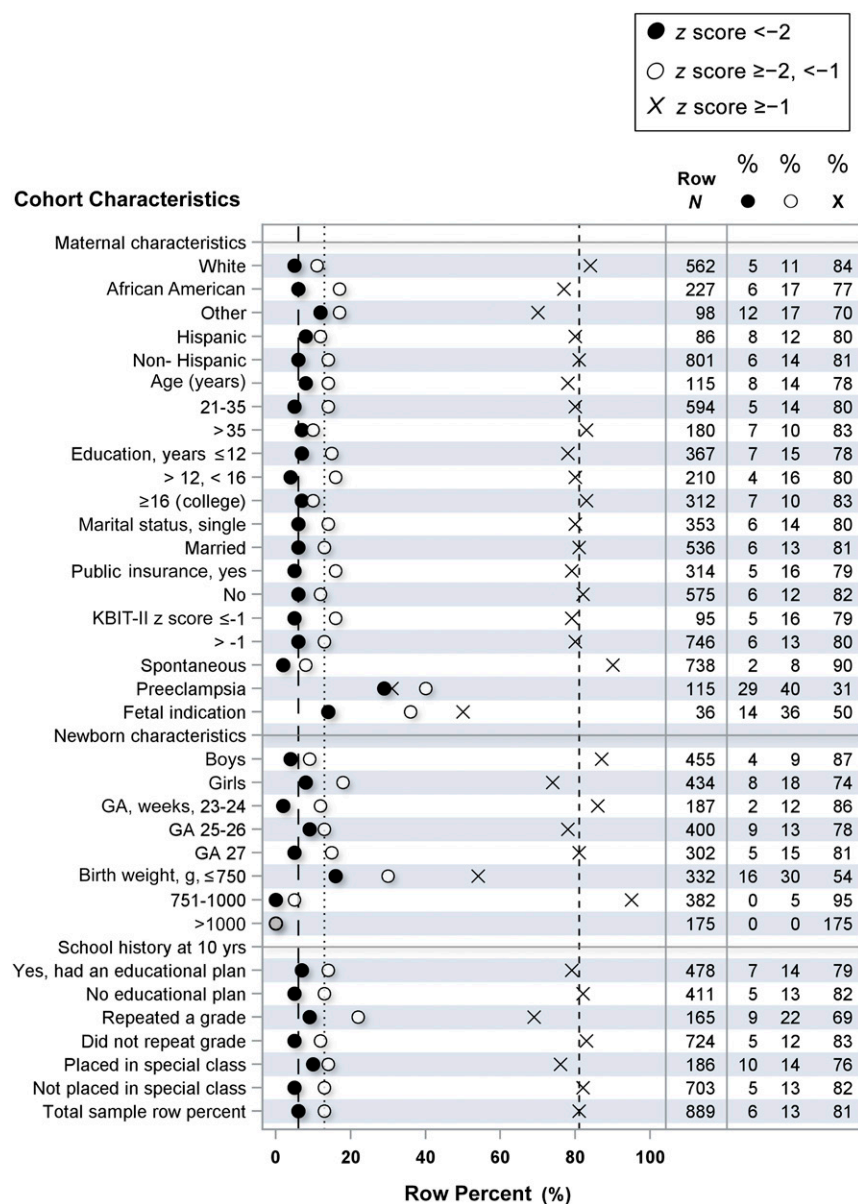
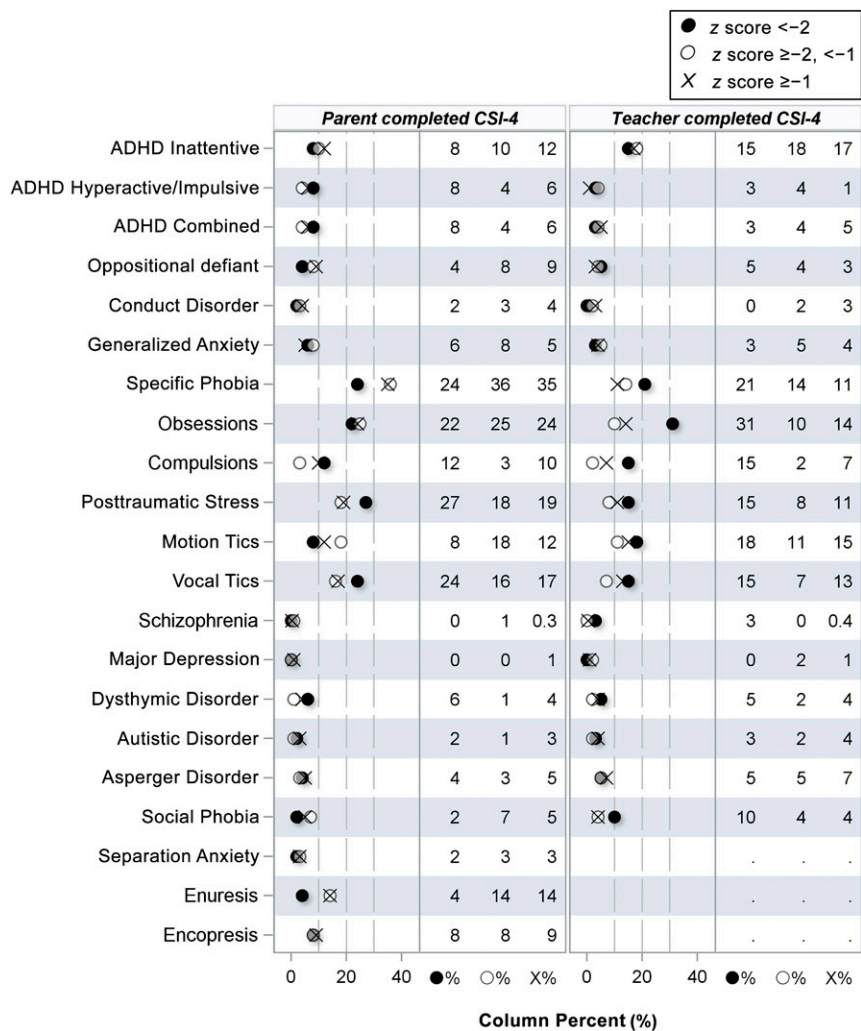


# Supplemental Information



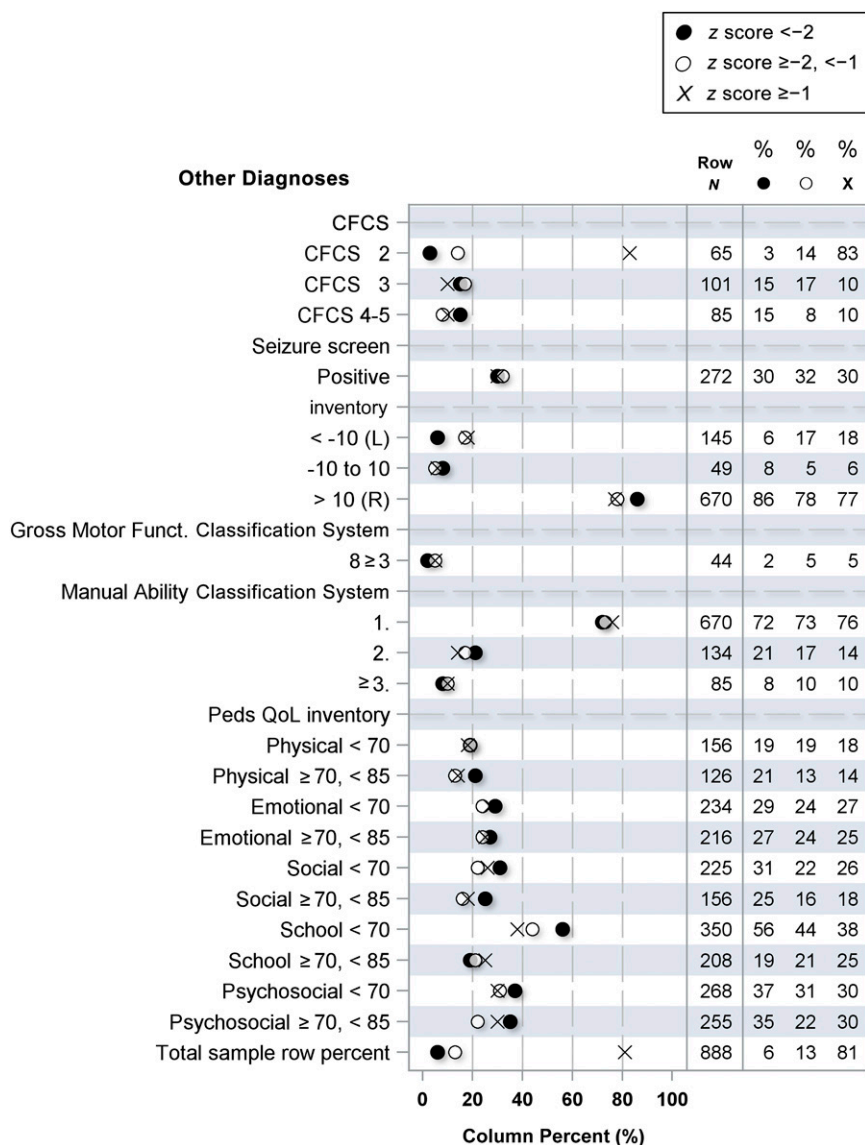
## SUPPLEMENTAL FIGURE 5

Row percents of children who did and did not have growth restriction defined by birth weight z score category ( $n = 889$ ). Max column  $N$ : ●,  $n = 53$ ; ○,  $n = 120$ ; X,  $n = 716$ . Vertical reference lines indicate a cohort prevalence (bottom line in table); gray circles indicate overlap; and maternal nonverbal intelligence was assessed with the Kaufman Brief Intelligence Test, Second Edition; and birth weight z score standard (Yudkin et al., 1987<sup>35</sup>). GA, gestational age; KBIT, Kaufman Brief Intelligence Test, Second Edition.



**SUPPLEMENTAL FIGURE 6**

Column percents of children who had each behavioral disorder listed on the left (screened in by a parent and separately by a teacher) by using the CSI-4 (based on the symptom count score) for each birth weight z score stratum. Max column *N* for parent assessments: ●, *n* = 51; ○, *n* = 120; X, *n* = 700. Max column *N* for teacher assessments: ●, *n* = 39; ○, *n* = 84; X, *n* = 517 (no information *n* = 12, 36, and 183, respectively). Gray circles indicate overlap; period indicates no information; and birth weight z score standard (Yudkin et al., 1987<sup>35</sup>). ADHD, attention-deficit/hyperactivity disorder.



**SUPPLEMENTAL FIGURE 7**

Column percents of children who had each characteristic listed on the left in each birth weight z score stratum. Max column N: ●, n = 52 (no information n = 1); ○, n = 120; X, n = 716. Gray circles indicate overlap, and birth weight z score standard (Yudkin et al., 1987<sup>35</sup>). CFCS, communication function classification system; L, left; Peds QoL, pediatric quality of life; R, right.

**SUPPLEMENTAL TABLE 1** Row Percents of Cognitive Test Scores in Each Birth Weight Z Score Stratum

Neurocognitive Assessments	Birth Weight		Cognitive Assessment Z Score			
	Z Score <sup>a</sup>		≤-2	>-2, ≤-1	>-1, ≤1	>1
			2.3%	13.7%	68.2%	15.8%
<b>DAS-II</b>						
Verbal	<-2		24	22	52	2
	≥-2, <-1		22	20	55	3
	≥-1		16	18	57	9
Word definitions	<-2		16	27	55	2
	≥-2, <-1		18	22	54	6
	≥-1		14	17	60	9
Verbal similarities	<-2		20	32	44	4
	≥-2, <-1		22	17	57	3
	≥-1		14	19	60	7
Nonverbal reasoning	<-2		14	35	47	4
	≥-2, <-1		20	25	52	3
	≥-1		14	24	57	6
Matrices	<-2		12	29	56	4
	≥-2, <-1		19	21	55	5
	≥-1		14	21	58	8
Sequential and quantitative reasoning	<-2		8	45	41	6
	≥-2, <-1		16	33	50	2
	≥-1		11	28	53	8
DAS-II IQ [(verbal and nonverbal reasoning)2]	<-2		18	28	52	2
	≥-2, <-1		21	22	53	3
	≥-1		14	18	64	4
<b>Language</b>						
OWLS listening comprehension	<-2		27	23	46	4
	≥-2, <-1		25	23	50	3
	≥-1		17	28	50	5
OWLS oral expression	<-2		22	33	39	6
	≥-2, <-1		38	22	47	3
	≥-1		18	22	54	7
<b>WIAT</b>						
Word reading	<-2		14	22	58	6
	≥-2, <-1		18	17	55	10
	≥-1		11	17	58	14
Pseudoword decoding	<-2		22	12	54	12
	≥-2, <-1		18	23	48	11
	≥-1		13	16	61	9
Numeric operations	<-2		17	35	46	2
	≥-2, <-1		17	28	52	3
	≥-1		16	21	57	6
Spelling	<-2		16	20	59	6
	≥-2, <-1		14	19	54	11
	≥-1		10	15	62	13

<sup>a</sup> External standard (Yudkin et al<sup>55</sup>).

**SUPPLEMENTAL TABLE 2** Row Percents of Executive Function Subtest Z Scores in Each Birth Weight Z Score Stratum

Neurocognitive Assessments	Birth Weight Z Score <sup>a</sup>	Cognitive Assessment Z Score			
		≤-2	>-2, ≤-1	>-1, ≤1	>1
		2.3%	13.7%	68.2%	15.8%
<b>Executive function</b>					
DAS-II working memory	<-2	20	30	48	2
	≥-2, <-1	23	18	57	2
	≥-1	17	17	62	4
DAS-II recall of digits backward	<-2	20	14	65	2
	≥-2, <-1	17	16	67	0
	≥-1	14	14	69	3
DAS-II recall of sequential order	<-2	26	24	48	2
	≥-2, <-1	28	10	61	1
	≥-1	19	13	64	4
NEPSY-II auditory attention	<-2	33	21	46	0
	≥-2, <-1	27	22	51	0
	≥-1	21	21	58	0
NEPSY-II auditory response set	<-2	37	23	37	4
	≥-2, <-1	23	27	47	3
	≥-1	18	28	49	4
NEPSY-II inhibition inhibition	<-2	43	22	33	2
	≥-2, <-1	37	21	41	1
	≥-1	32	24	40	4
NEPSY-II inhibition switching	<-2	39	29	31	0
	≥-2, <-1	33	27	33	7
	≥-1	26	29	38	7
NEPSY-II animal sorting	<-2	33	27	38	2
	≥-2, <-1	28	37	31	3
	≥-1	28	30	39	3
<b>Processing speed</b>					
NEPSY-II inhibition naming	<-2	43	16	33	8
	≥-2, <-1	39	17	38	6
	≥-1	29	21	43	8
<b>Visual perception</b>					
NEPSY-II arrows	<-2	44	13	40	2
	≥-2, <-1	30	28	41	2
	≥-1	24	22	47	6
NEPSY-II geometric puzzles	<-2	19	29	50	2
	≥-2, <-1	19	20	58	3
	≥-1	16	22	58	4
<b>Visual motor function</b>					
NEPSY-II visuomotor precision	<-2	27	35	31	8
	≥-2, <-1	27	30	38	5
	≥-1	19	36	38	7
NEPSY-II fingertip tap sequence	<-2	10	14	69	8
	≥-2, <-1	15	10	61	14
	≥-1	12	14	61	13

<sup>a</sup> External standard (Yudkin et al<sup>35</sup>).

**SUPPLEMENTAL TABLE 3** Column Percent of Children Who Screened Positive on the Total SRS, SCQ, and ASD (Based on a Positive ADOS-2 Assessment) for Each Birth Weight Z Score Stratum

Assessment	Score or Response	Birth Weight Z Score <sup>a</sup>			Row
		≤-2	>-2, ≤-1	>-1	<i>N</i>
SRS <sup>b</sup>					
Total	≥76	18	12	12	109
	60-75	24	21	18	162
Social awareness	≥76	12	4	4	40
	60-75	24	19	18	161
Social cognition	≥76	16	10	10	93
	60-75	29	25	18	168
Social communication	≥76	14	11	9	85
	60-75	24	18	19	163
Social motivation	≥76	12	7	7	65
	60-75	27	28	23	206
Autistic mannerisms	≥76	22	14	15	132
	60-75	16	25	17	156
SCQ communication items					
2. To and from conversation	No	4	3	4	35
3. Odd phrases, near repeats	Yes	38	30	27	239
4. Socially inappropriate questions	Yes	36	21	22	191
5. Mixes up pronouns	Yes	26	22	24	205
6. Use made-up words	Yes	32	15	16	142
20. Talk just to be friendly	No	17	17	13	119
21. Spontaneously copy you	No	21	30	27	238
22. Spontaneously point	No	23	23	18	164
23. Other gestures to indicate	No	37	41	38	338
24. Nod head to mean yes	No	8	11	10	85
25. Shake head to mean no	No	6	8	9	77
34. Spontaneously join social games	No	19	21	15	142
35. Play make-believe games	No	17	23	16	148
SCQ total	Positive	21	14	14	129
ASD	Positive	16	5	7	61
Maximum column <i>N</i>	—	52	120	703	875

—, not applicable.

<sup>a</sup> External standard (Yudkin et al<sup>35</sup>).

<sup>b</sup> SRS was normal at <60, mild at 60-75, and severe at ≥76.

**SUPPLEMENTAL TABLE 4** Column Percents of CCC-2 Z Score Categories in Each Birth Weight Z Score Stratum

CCC-2 Component	Z Score	Birth Weight Z Score <sup>a</sup>			Row
		$\leq -2$	$> -2, \leq -1$	$> -1$	<i>N</i>
Speech	$\leq -2$	12	14	9	84
	$> -2, \leq -1$	14	12	13	109
Syntax	$\leq -2$	14	9	9	82
	$> -2, \leq -1$	14	19	14	128
Semantics	$\leq -2$	14	6	8	67
	$> -2, \leq -1$	20	17	14	126
Coherence	$\leq -2$	14	8	9	81
	$> -2, \leq -1$	24	16	14	124
Initiation	$\leq -2$	8	6	7	62
	$> -2, \leq -1$	18	15	15	127
Scripted language	$\leq -2$	6	9	8	68
	$> -2, \leq -1$	18	15	11	102
Context	$\leq -2$	12	6	8	67
	$> -2, \leq -1$	20	18	13	120
Nonverbal communication	$\leq -2$	14	8	10	87
	$> -2, \leq -1$	20	13	11	99
Social relations	$\leq -2$	6	6	7	61
	$> -2, \leq -1$	20	10	12	106
Interests	$\leq -2$	8	4	6	49
	$> -2, \leq -1$	28	16	15	132
Composite score (GCC)	<64 (bad)	6	4	3	32
Maximum column <i>N</i>	—	50	116	688	854

GCC, general communication composite; —, not applicable.

<sup>a</sup> External standard (Yudkin et al<sup>35</sup>).