

Supplementary Materials for:

Mediating and Moderating Effects of Iron Homeostasis Alterations on Fetal Alcohol–Related Growth and Neurobehavioral Deficits

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Table S1. Relation of potential confounders to neurobehavioral outcomes^a

	2-wk weight ^b	2-wk length ^b	2-wk head circum- ference ^b	5-yr weight ^b	5-yr length ^b	5-yr head circum- ference	Visual recognition memory ^c (6.5 mo)	Visual recognition memory ^c (12 mo)	Mean look time ^c (6.5 mo)	Mean look time ^c (12 mo)	Symbolic play ^d	EAS ^e shy- ness	EAS ^e emotio- nality	EAS ^e socia- bility	EAS ^e act- ivity
Maternal age	-0.16 [†]	-0.12	-0.17 [*]	-0.14 [†]	-0.11	-0.04	-0.15 [†]	0.00	-0.11	0.06	-0.03	0.00	0.05	-0.10	0.00
Gravidity	-0.10	-0.05	-0.12	-0.13	-0.02	-0.04	-0.14 [†]	-0.03	-0.01	0.01	-0.03	0.09	0.17 [*]	-0.17 [*]	0.03
Maternal education	0.26 ^{**}	0.29 ^{***}	0.17 [†]	0.32 ^{***}	0.23 ^{**}	0.01	0.09	-0.03	0.03	-0.07	0.15 [†]	0.08	0.02	0.02	0.00
Cigarettes/day	-0.23 ^{**}	-.19 [*]	-0.19 [*]	-0.19 [*]	-0.14 [†]	0.03	0.02	-0.06	-0.12	0.08	0.07	0.15 [†]	0.12	-0.08	0.02
Marijuana use	0.00	0.00	-0.02	-0.07	0.03	-0.09	-0.06	-0.13	0.18 [*]	0.10	0.13	0.14 [†]	0.11	-0.05	-0.17 [*]
Methamphetamine use	-0.06	-0.10	-0.07	-0.02	-0.06	0.05	0.06	-0.03	-0.05	-0.02	0.10	-0.04	0.06	0.13 [†]	0.01
Wk gestation at delivery	0.57 ^{**}	0.52 ^{**}	0.58 ^{**}	0.34 ^{**}	0.28 ^{***}	0.07	0.16 [†]	0.03	0.07	-0.11	0.21 ^{**}	-0.11	-0.05	0.08	0.09
Infant sex	-0.01	-0.03	0.07	-0.04	-0.14 [†]	0.09	0.00	0.01	0.02	0.03	0.21 [*]	0.10	0.05	-0.13	-0.19 [*]
Age at assessment	--	--	--	--	--	0.05	0.01	-0.03	-0.05	0.01	-0.25 ^{**}	0.03	0.00	0.10	0.07

^aValues are Pearson *r*'s.

^bAge/sex-specific z-scores from World Health Organization norms [1]; *n* = 61 controls, 69 heavily exposed at 2 wk; 67 controls, 80 heavily exposed at 5 yr.

^cFrom the Fagan Test of Infant Intelligence [2,3]; *n* = 69 controls, 75 heavily exposed at 6.5 mo; 65 controls, 79 heavily exposed at 12 mo.

^dHighest level of complexity of imitated play [4]; *n* = 64 controls, 78 heavily exposed.

^eEmotionality, Activity, Sociability Temperament scale [5]; *n* = 70 controls, 81 heavily exposed.

[†]*p* < 0.10; ^{*}*p* < 0.05; ^{**}*p* < 0.01; ^{***}*p* < 0.001.

Table S2. Potential interaction effects between prenatal alcohol exposure and iron indices (II) on infant growth, neurobehavior, and temperament^a

(A) Anthropometry measures

2-wk length-for-age z-scores^b	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.84 (-0.96, 2.63)	-0.24 (-0.81, 0.34)	-0.38 (-1.06, 0.30)	0.273
Hemoglobin (g/dL)	-0.88 (-5.32, 3.56)	-0.03 (-0.31, 0.24)	0.05 (-0.35, 0.45)	0.812
Hemoglobin:log(ferritin) ^d	-1.90 [†] (-4.02, 0.22)	0.09 (-0.27, 0.44)	0.39 (-0.08, 0.87)	0.105
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	1.60 (-1.78, 4.98)	0.11 (-1.78, 4.98)	-0.34 (-0.97, 0.30)	0.293
Hemoglobin (g/dL)	-1.75 (-4.43, 0.93)	0.06 (-0.05, 0.17)	0.11 (-0.07, 0.28)	0.230
Hemoglobin:log(ferritin) ^d	-2.68* (-4.92, -0.44)	0.02 (-0.50, 0.45)	0.89 (0.14, 1.65)	0.021
<u>2-wk weight-for-age z-scores^b</u>				
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.52 (-1.22, 2.25)	-0.10 (-0.67, 0.46)	-0.31 (-0.97, 0.35)	0.360
Hemoglobin (g/dL)	0.22 (-3.93, 4.37)	0.04 (-0.22, 0.29)	-0.06 (-0.43, 0.32)	0.763
Hemoglobin:log(ferritin) ^d	-1.29 (-3.32, 0.73)	0.08 (-0.26, 0.42)	0.23 (-0.23, 0.68)	0.323
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.67 (-2.52, 3.85)	0.06 (-0.33, 0.45)	-0.19 (-0.78, 0.41)	0.541
Hemoglobin (g/dL)	-3.21* (-5.75, -0.67)	0.02 (-0.09, 0.12)	0.20* (0.03, 0.36)	0.020
Hemoglobin:log(ferritin) ^d	-2.97** (-5.15, 0.79)	-0.08 (-0.55, 0.38)	0.96* (0.22, 1.70)	0.011
<u>2-wk head circumference-for-age z-scores^b</u>				
	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}

<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	1.55 [†]	0.15	-0.74*	0.028
	(-0.19, 3.28)	(-0.41, 0.71)	(-1.39, 0.08)	
Hemoglobin (g/dL)	1.77	0.14	-0.21	0.291
	(-2.50, 6.05)	(-0.13, 0.41)	(-0.60, 0.18)	
Hemoglobin:log(ferritin) ^d	-2.18*	0.05	0.42 [†]	0.074
	(-4.23, -0.13)	(-0.29, 0.40)	(-0.04, 0.88)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.76	0.09	0.08	0.803
	(-4.08, 2.57)	(-0.30, 0.49)	(-0.54, 0.70)	
Hemoglobin (g/dL)	-0.68	0.07	0.02	0.799
	(-3.15, 1.79)	(-0.03, 0.17)	(-0.14, 0.18)	
Hemoglobin:log(ferritin) ^d	-0.26	0.13	-0.03	0.943
	(-2.33, 1.80)	(-0.31, 0.56)	(-0.72, 0.67)	
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5-yr length-for-age z-scores^b	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.19	-0.27	-0.02	0.934
	(-1.48, 1.11)	(-0.69, 0.15)	(-0.51, 0.47)	
Hemoglobin (g/dL)	-3.02 [†]	-0.21	0.25 [†]	0.081
	(-6.07, 0.03)	(-0.41, 0.02)	(-0.03, 0.53)	
Hemoglobin:log(ferritin) ^d	-1.31	0.01	0.23	0.176
	(-2.83, 0.22)	(-0.25, 0.28)	(-0.11, 0.57)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	1.26	-0.06	-0.30	0.211
	(-1.24, 3.77)	(-0.38, 0.25)	(-0.77, 0.17)	
Hemoglobin (g/dL)	-1.26	0.00	0.06	0.353
	(-3.33, 0.80)	(-0.09, 0.09)	(-0.07, 0.20)	
Hemoglobin:log(ferritin) ^d	-1.95*	0.04	0.59 [†]	0.059
	(-3.74, 0.15)	(-0.34, 0.42)	(-0.02, 1.20)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-0.43*	-0.35	0.42	0.239
	(-0.76, -0.10)	(-0.87, 0.17)	(-0.28, 1.12)	
Iron deficiency anemia ^{c,e}	-0.11	0.24	-0.47	0.323
	(-0.54, 0.33)	(-0.47, 0.94)	(-1.42, 0.47)	
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5-yr weight-for-age z-scores^b	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.51	-0.37	0.05	0.838

	(-1.75, 0.73)	(-0.76, 0.03)	(-0.41, 0.52)	
Hemoglobin (g/dL)	-1.18	-0.11	-0.06	0.645
	(-4.16, 1.81)	(-0.30, 0.09)	(-0.21, 0.34)	
Hemoglobin:log(ferritin) ^d	-0.24	0.23 ⁺	-0.04	0.803
	(-1.71, 1.23)	(-0.03, 0.48)	(-0.337, 0.28)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	1.06	0.11	-0.29	0.227
	(-1.48, 3.60)	(-1.48, 3.60)	(-0.77, 0.19)	
Hemoglobin (g/dL)	-0.51	0.03	0.00	0.987
	(-2.62, 1.59)	(-0.07, 0.12)	(-0.14, 0.14)	
Hemoglobin:log(ferritin) ^d	-1.39	-0.04	0.32	0.316
	(-3.24, 0.46)	(-0.44, 0.35)	(-0.31, 0.95)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-0.57***	-0.01	0.20	0.560
	(-0.89, 0.25)	(-0.51, 0.49)	(-0.48, 0.88)	
Iron deficiency anemia ^{c,e}	-0.42 ⁺	0.24	-0.31	0.530
	(-0.87, 0.03)	(-0.49, 0.96)	(-1.29, 0.67)	

5-yr head circumference (cm)

	B _{PAE}	B _{II}	B _{PAE by II}	P _{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	-2.38	-0.05	0.21	0.789
	(-6.47, 1.71)	(-1.36, 1.26)	(-1.34, 1.76)	
Hemoglobin (g/dL)	-6.19	0.08	0.40	0.363
	(-15.63, 3.26)	(-0.53, 0.68)	(-0.46, 1.26)	
Hemoglobin:log(ferritin) ^d	-0.89	0.16	0.21	0.704
	(-5.68, 3.90)	(-0.68, 0.99)	(-1.27, 0.86)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-3.44	0.15	0.32	0.699
	(-12.05, 5.17)	(-0.94, 1.24)	(-1.30, 1.93)	
Hemoglobin (g/dL)	-3.73	0.00	0.13	0.590
	(-10.78, 3.33)	(-0.31, 0.31)	(-0.33, 0.59)	
Hemoglobin:log(ferritin) ^d	-2.30	-0.04	0.17	0.877
	(-8.58, 3.99)	(-1.38, 1.30)	(-1.98, 2.31)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-1.86***	0.21	0.06	0.954
	(-2.91, -0.82)	(-1.41, 1.84)	(-2.13, 2.25)	
Iron deficiency anemia ^{c,e}	-1.10***	0.25	-0.16	0.827
	(-1.76, -0.44)	(-0.83, 1.32)	(-1.62, 1.30)	

(B) Neurobehavior

Visual recognition memory (6.5 mo)^f	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	9.02*	2.26	-3.94*	0.021
	(0.09, 17.96)	(-0.52, 5.04)	(-7.28, -0.60)	
Hemoglobin (g/dL)	18.25	0.65	-1.78	0.115
	(-6.20, 42.69)	(-0.78, 2.09)	(-3.99, -0.44)	
Hemoglobin:log(ferritin) ^d	-9.87 ⁺	-1.11	-1.92	0.115
	(-20.74, 1.01)	(-2.91, 0.70)	(-0.48, 4.32)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	14.68	0.93	2.94	0.123
	(-5.04, 34.41)	(-1.46, 3.32)	(-6.69, 0.81)	
Hemoglobin (g/dL)	9.84	0.52	-0.73	0.170
	(-6.39, 26.08)	(-0.13, 1.16)	(-1.78, 0.32)	
Hemoglobin:log(ferritin) ^d	1.84	1.60	-0.91	0.726
	(-13.46, 17.13)	(-1.34, 4.54)	(-6.02, 4.21)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-1.09	0.50	-0.30	0.904
	(-3.71, 1.54)	(-3.19, 4.19)	(-5.24, 4.64)	
Iron deficiency anemia ^{c,e}	-1.95	0.21	-0.03	0.993
	(-5.40, 1.50)	(-4.85, 5.27)	(-6.77, 6.71)	
Visual recognition memory (12 mo)^f	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	-3.52	0.23	0.41	0.824
	(-13.24, 6.20)	(-2.83, 3.29)	(-3.25, 4.07)	
Hemoglobin (g/dL)	-27.65*	-0.74	2.32*	0.038
	(-51.65, -3.66)	(-2.28, 0.81)	(0.13, 4.50)	
Hemoglobin:log(ferritin) ^d	0.68	12.56	-12.87	0.557
	(-9.76, 11.11)	(-23.66, 48.78)	(-56.12, 30.38)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-4.74	-2.13	0.48	0.820
	(-26.66, 17.19)	(-4.82, 0.56)	(-3.66, 4.61)	
Hemoglobin (g/dL)	2.20	-0.30	-0.35	0.531
	(-14.79, 19.20)	(-1.00, 0.41)	(-1.45, 0.75)	
Hemoglobin:log(ferritin) ^d	-11.74	-8.16	23.23	0.268
	(-26.74, 3.25)	(-35.88, 19.57)	(-18.18, 64.64)	

6.5-mo infant iron indices

Iron deficiency ^{c,e}	-3.18*	-0.51	2.92	0.275
	(-5.91, -0.46)	(-4.56, 3.54)	(-2.35, 8.19)	
Iron deficiency anemia ^{c,e}	-4.55*	-3.19	5.77	0.118
	(-8.12, -0.98)	(-8.70, 2.32)	(-1.50, 13.05)	

Information processing time (6.5 mo)^f

Maternal iron indices

Ferritin (logged ug/L values) ^c	-0.25	0.02	-0.09	0.437
	(-0.39, 0.89)	(-0.18, 0.22)	(-0.33, 0.14)	
Hemoglobin (g/dL)	1.46	-0.03	-0.13 ⁺	0.091
	(-0.23, 3.15)	(-0.13, 0.07)	(-0.28, 0.02)	
Hemoglobin:log(ferritin) ^d	0.35	1.27	-1.58	0.274
	(-0.34, 1.04)	(-1.12, 3.67)	(-4.42, 1.26)	

Neonatal iron indices

Ferritin (logged ug/L values) ^c	0.42	-0.03	0.08	0.447
	(-1.54, 0.70)	(-0.16, -0.11)	(-0.13, 0.29)	
Hemoglobin (g/dL)	-0.06	0.00	0.00	0.997
	(-0.91, 1.03)	(-0.04, 0.04)	(-0.06, 0.06)	
Hemoglobin:log(ferritin) ^d	-0.28	-0.18	0.88	0.450
	(-1.10, 0.54)	(-1.59, 1.23)	(-1.43, 3.19)	

6.5-mo infant iron indices

Iron deficiency ^{c,e}	-0.04	-0.07	0.06	0.713
	(-0.22, 0.15)	(-0.33, 0.19)	(-0.28, 0.41)	
Iron deficiency anemia ^{b,e}	-0.22 ⁺	-0.01	0.42 ⁺	0.088
	(-0.46, 0.02)	(-0.38, 0.35)	(-0.06, 0.91)	

Information processing time (12 mo)^f

Maternal iron indices

Ferritin (logged ug/L values) ^c	-0.20	-0.01	0.11	0.356
	(-0.85, 0.44)	(-0.21, 0.19)	(-0.13, 0.35)	
Hemoglobin (g/dL)	0.11	0.01	0.00	0.994
	(-1.51, 1.73)	(-0.09, 0.12)	(-0.15, 0.15)	
Hemoglobin:log(ferritin) ^d	0.50	0.01	-0.09	0.269
	(-0.24, 1.24)	(-0.12, 0.13)	(-0.26, 0.07)	

Neonatal iron indices

Ferritin (logged ug/L values) ^c	0.50	-0.02	-0.08	0.559
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	(-0.88, 1.89)	(-0.19, 0.15)	(-0.34, 0.18)	
Hemoglobin (g/dL)	0.20	-0.01	-0.01	0.858
	(-0.89, 1.28)	(-0.08, 0.06)	(-0.08, 0.06)	
Hemoglobin:log(ferritin) ^d	0.04	-0.02	0.02	0.909
	(-0.95, 1.03)	(-0.19, 0.22)	(-0.32, 0.36)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	0.03	0.07	0.22	0.199
	(-0.14, 0.21)	(-0.19, 0.33)	(-0.12, 0.56)	
Iron deficiency anemia ^{c,e}	0.21	0.10	-0.09	0.725
	(-0.03, 0.45)	(-0.27, 0.46)	(-0.57, 0.40)	
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Symbolic Play^g	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	2.61	0.78	-1.04	0.288
	(-2.47, 7.69)	(-0.88, 2.44)	(-2.97, 0.89)	
Hemoglobin (g/dL)	-5.41	-0.01	0.48	0.392
	(-17.67, 6.85)	(-0.78, 0.76)	(-0.63, 1.60)	
Hemoglobin:log(ferritin) ^d	4.63	-0.62	1.04	0.112
	(-10.46, 1.19)	(-1.65, 0.40)	(-0.25, 2.33)	
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-1.48	-0.21	0.31	0.744
	(-11.53, 8.58)	(-1.49, 1.07)	(-1.59, 2.21)	
Hemoglobin (g/dL)	-5.43	0.09	0.37	0.161
	(-13.43, 2.57)	(-0.27, 0.44)	(-0.15, 0.90)	
Hemoglobin:log(ferritin) ^d	3.46	-0.47	1.28	0.306
	(-10.71, 3.79)	(-10.71, 3.79)	(-1.19, 3.75)	
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-0.30	-0.30	-0.66	0.625
	(-2.35, 1.75)	(-2.35, 1.75)	(-3.33, 2.01)	
Iron deficiency anemia ^{c,e}	0.18	-0.01	-1.92	0.251
	(-1.03, 1.39)	(-2.57, 2.54)	(-5.20, 1.37)	

(C) Temperament^h

Emotionality	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.24	0.08	-0.06	0.603
	(-0.34, 0.82)	(-0.11, 0.26)	(-0.27, 0.16)	

Hemoglobin (g/dL)	1.19 (-0.27, 2.65)	0.07 (-0.02, 0.16)	-0.10 (-0.23, 0.03)	0.143
Hemoglobin:log(ferritin) ^d	0.01 (-0.61, 0.63)	0.13 (-2.05, 2.31)	0.37 (-2.19, 2.92)	0.776
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.71 (-0.48, 1.90)	0.15* (0.00, 0.29)	-0.12 (-0.35, 0.10)	0.276
Hemoglobin (g/dL)	0.57 (-0.45, 1.59)	0.01 (-0.04, 0.05)	-0.03 (-0.10, 0.03)	0.346
Hemoglobin:log(ferritin) ^d	0.19 (-0.69, 1.07)	0.85 (-0.84, 2.55)	-0.35 (-2.82, 2.12)	0.779
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	0.10 (-0.07, 0.26)	0.12 (-0.12, 0.35)	0.05 (-0.26, 0.36)	0.740
Iron deficiency anemia ^{c,e}	0.11 (-0.10, 0.32)	0.03 (-0.30, 0.36)	0.00 (-0.43, 0.43)	0.998

Activity	B _{PAE}	B _{II}	B _{PAE by II}	P _{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.07 (-0.57, 0.71)	0.06 (-0.14, 0.26)	-0.05 (-0.25, 0.18)	0.653
Hemoglobin (g/dL)	-0.10 (-1.72, 1.53)	0.03 (-0.07, 0.13)	0.00 (-0.15, 0.15)	0.973
Hemoglobin:log(ferritin) ^d	0.25 (-0.98, 0.49)	-0.02 (-0.15, 0.11)	0.04 (-0.12, 0.21)	0.508
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.11 (-1.27, 1.49)	0.08 (-0.10, 0.25)	-0.03 (-0.29, 0.23)	0.798
Hemoglobin (g/dL)	-0.84 (-1.96, 0.28)	-0.01 (-0.06, 0.04)	0.05 (-0.02, 0.13)	0.154
Hemoglobin:log(ferritin) ^d	-0.82 (-1.83, 0.19)	-0.13 (-0.34, 0.80)	-0.27 (-0.07, 0.61)	0.120
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	-0.05 (-0.22, 0.13)	-0.26* (-0.52, 0.00)	0.07 (-0.26, 0.41)	0.673
Iron deficiency anemia ^{c,e}	-0.04 (-0.25, 0.18)	-0.29 (-0.64, 0.06)	0.13 (-0.32, 0.58)	0.574

Sociability	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.15 (-0.48, 0.79)	-0.03 (-0.23, 0.17)	-0.04 (-0.28, 0.20)	0.721
Hemoglobin (g/dL)	0.32 (-1.28, 1.92)	-0.08 (-0.18, 0.03)	-0.03 (-0.17, 0.12)	0.726
Hemoglobin:log(ferritin) ^d	-0.17 (-0.92, 0.58)	-0.01 (-0.14, 0.12)	0.05 (-0.12, 0.21)	0.595
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	0.70 (-0.76, 2.17)	-0.02 (-0.20, 0.17)	-0.13 (-0.41, 0.15)	0.354
Hemoglobin (g/dL)	0.46 (-0.74, 1.67)	0.01 (-0.04, 0.06)	-0.03 (-0.11, 0.05)	0.438
Hemoglobin:log(ferritin) ^d	0.20 (-0.89, 1.29)	0.10 (-0.14, 0.33)	-0.07 (-0.43, 0.30)	0.721
<u>6.5-mo infant iron indices</u>				
Iron deficiency ^{c,e}	0.02 (-0.16, 0.21)	-0.11 (-0.37, 0.16)	-0.02 (-0.36, 0.33)	0.922
Iron deficiency anemia ^{c,e}	-0.13 (-0.37, 0.12)	-0.18 (-0.56, 0.19)	0.32 (-0.17, 0.80)	0.200
Shyness	B_{PAE}	B_{II}	B_{PAE by II}	P_{PAE by II}
<u>Maternal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.26 (-0.97, 0.45)	-0.09 (-0.31, 0.14)	0.13 (-0.13, 0.40)	0.319
Hemoglobin (g/dL)	0.20 (-1.60, 1.99)	0.09 (-0.03, 0.20)	-0.01 (-0.18, 0.15)	0.885
Hemoglobin:log(ferritin) ^d	-0.39 (-1.15, 0.36)	-1.87 (-4.52, 0.78)	2.10 (-1.02, 5.21)	0.186
<u>Neonatal iron indices</u>				
Ferritin (logged ug/L values) ^c	-0.78 (-2.30, 0.74)	-0.08 (-0.27, 0.11)	0.17 (-0.12, 0.46)	0.247
Hemoglobin (g/dL)	-0.24 (-1.52, 1.05)	-0.03 (-0.08, 0.03)	0.02 (-0.06, 0.11)	0.604
Hemoglobin:log(ferritin) ^d	-0.11 (-1.23, 1.02)	-0.24 (-1.92, 2.39)	0.52 (-2.61, 3.65)	0.742
<u>6.5-mo infant iron indices</u>				

Iron deficiency ^{c,e}	0.12 (-0.07, 0.32)	0.28* (0.00, 0.57)	-0.19 (-0.56, 0.19)	0.334
Iron deficiency anemia ^{c,e}	0.09 (-0.18, 0.35)	0.15 (-0.26, 0.56)	-0.24 (-0.77, 0.29)	0.369

^aValues are raw regression coefficients (95% confidence intervals) from linear regression models regressing a given outcome on PAE (B_{PAE}), the given iron measure (B_{II}), a PAE x iron measure outcome ($B_{PAE \text{ by } II}$, $p_{PAE \text{ by } II}$), and potential confounders (maternal age, prenatal cigarettes/day, maternal education, and wk gestation at delivery for anthropometry measures, with the addition of age at time of measurement for 5-yr head circumference; maternal age, gravidity, and wk gestation at delivery for visual recognition memory; maternal education, wk gestation at delivery, infant sex, and age at time of assessment for symbolic play; gravidity and socioeconomic status for emotionality; infant sex for activity; gravidity and prenatal methamphetamine use (days/mo) for sociability; prenatal cigarette smoking (cigarettes/day) and marijuana use (days/mo) for shyness).

^bAge/sex-specific z-scores from World Health Organization norms [1]; $n = 61$ controls, 69 heavily exposed at 2 wk; 67 controls, 80 heavily exposed at 5 yr.

^cPositively related to prenatal alcohol exposure in previously published analyses [6].

^dNegatively related to prenatal alcohol exposure in previously published analyses [6].

^eYes = 1; no = 0.

^fFrom the Fagan Test of Infant Intelligence [2,3]; $n = 69$ controls, 75 heavily exposed at 6.5 mo.

^gHighest level of complexity of imitated play [4]; $n = 64$ controls, 78 heavily exposed.

^hEmotionality, Activity, Sociability Temperament scale [5]; $n = 70$ controls, 81 heavily exposed.

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

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